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# EASTERN INDUSTRIALIZATION AND ITS EFFECT ON THE WEST

By  
G. E. HUBBARD

*With a conclusion by*  
PROFESSOR T. E. GREGORY

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*'It is yet to be seen how much we can do with this our "Greatness in small things". Human fingers are still the very best machines that mankind do possess, and if the 400,000,000 dexterous fingers of the Japanese are made to be fully employed, we know not what prodigious revolutions they will make in industrial circles. The time may come when we beat the world with the tips of our fingers.'*

YOITHI MAYEDA

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## PREFACE TO THE SECOND EDITION

IN the first edition of this book the general conclusions concerning the future of Eastern industrialization were expressly based on the assumption that 'the Far East will remain at peace'.

It is a matter for the profoundest regret that before a new edition appears events have falsified that assumption. Of the four countries which form the basis of the study two are engaged in a war of which the issue is bound to influence profoundly their future economic development. The destruction of industrial capital in China; the heavy war strains imposed on Japanese industry and finance; political changes in Far Eastern territories important as markets, fields for investment, and sources of industrial raw materials—these and other potential consequences of the present struggle must be taken into account in any prognosis of the future of industrialization in the Eastern Hemisphere.

The task of revising *Eastern Industrialization* has thus become one of exceptional difficulty. It is, nevertheless, a not unreasonable assumption that the essential characteristics of the industrial structures of the Far Eastern countries—the description of which forms the gist of this work—are unlikely to be radically altered, and that, in spite of temporary dislocations, established trends are bound in the long run to reassert their influence. It is this supposition which has been held to justify a revised edition of the book.

As to the lines upon which revision has proceeded, the statistical material throughout and the accounts of industrial development in the individual countries have been brought as nearly as possible up to date. The attempt has also been made to repropportion the essential parts of the 'argument' in the light of the changes which have occurred, or which are at present taking place, in the general situation.

Modifications of the original text have been carried out

notably in the chapters on Japan, which have been largely rewritten. This has been done with the expert help of Mr. N. Skene Smith, who, as Professor of Economics at the University of Commerce in Tokyo till the spring of 1937, has for the past six years been observing and studying Japan's industrial problems on the spot.

The important changes and vicissitudes of the last two years in the staple export trades of Great Britain, and particularly in the Lancashire cotton industry, have necessitated an almost equally thorough revision of the British chapters. For this purpose the assistance has again been enlisted of Mr. S. R. Dennison (Assistant Lecturer in the Department of Economics and Commerce of Manchester University), who was mainly responsible for this section of the book in the original edition. It is perhaps appropriate to add that, while the information on the Far Eastern countries is primarily designed for Western readers, the case is reversed as regards the chapters describing conditions in Great Britain, which have been written largely with a view to supplying the needs of oriental students of the problems of industrial competition.

To adjust the chapters on China to the radical changes produced by the present state of war would obviously have been an impossible task. These chapters have, however, been considerably recast with the intention of bringing them into line with the major economic developments which occurred in the interval between the date of the first publication of the book in 1935 and the outbreak of hostilities between Japan and China in July 1937.

The portions dealing with India, where industrial conditions have been relatively stable during the intervening period, have called for fewer amendments, but care has been taken to bring the position as nearly as possible up to date.

The discussion of the 'Effects of Eastern Industrialization upon Trade Relationships in the British Commonwealth', which was included in the first edition, has been omitted in the second, owing to the fact that changes in the trade relationship between Japan and various parts

of the Commonwealth, as well as modifications of policy in regard to inter-Commonwealth trade generally, have rendered out of date so much of what was written in 1935 that its adjustment to present conditions would require more drastic revision than a fresh edition would warrant. The space gained has been used for the expansion of other sections.

Professor T. E. Gregory's 'Conclusions', being of a more general and theoretical character than the rest of the work, and dealing, as they do, with broad economic principles the validity of which is not so dependent on political vicissitudes, have been left in their original form.

A substantial amount of fresh published material bearing on the subject of the book has appeared in the interval since the first edition was issued, and references to this will be found in the text and the footnotes.

The book has been re-indexed.

*January 21st, 1938*

G. E. HUBBARD





## FOREWORD TO THE FIRST EDITION

THIS book owes its origin to an inquiry by the Institute of Pacific Relations—for which the Royal Institute of International Affairs acts as the British Council—into the international aims and results, in the Pacific, of the social, economic, and political policies of the countries most intimately connected with that area—a topic which is to be one of the principal subjects for discussion at the Institute of Pacific Relations Conference which will be held in 1936.

In selecting the study of Eastern Industrialization as the principal contribution to be made from the United Kingdom towards this inquiry, the Council of the Royal Institute was influenced by the interest felt by Great Britain in this subject; and it was agreed that it would also be valuable, both for the purposes of the Conference and for the general information of those interested in the question, to include in the survey some estimate of the economic effects of this industrialization in Great Britain.

The work of compilation was entrusted by the Council of Chatham House to Mr. G. E. Hubbard, a member of the Royal Institute who has had considerable personal experience of the Far East. The thanks of the Council are due to Mr. Hubbard for the many months of labour which he has expended on this work and to Mr. Denzil Baring, also an Institute member, who has assisted him throughout. Expert collaboration has been obtained from various quarters, and substantial contributions—amounting in some cases to the virtual authorship of particular sections—were given by the following:

Mr. Oliver Lawrence, formerly Economic Assistant to the Information Department of Chatham House (in the chapter on World Markets).

Professor G. C. Allen, of Liverpool University (in the chapter on Japan).

Mrs. Vera Anstey, of the London School of Economics (in the chapter on India).

Mr. S. R. Dennison, of Trinity College, Cambridge (in the chapter on Great Britain).

The final chapter, as indicated on the title-page, is from the pen of Professor T. E. Gregory.

With Mr. Hubbard and with these individual contributors lies the responsibility for any opinions expressed in the study, since Chatham House is precluded by its Royal Charter from expressing an opinion on any aspect of international relations.

Further valuable assistance, mostly in the form of constructive criticism, was received from members of Chatham House, from members of the Institutes of International Affairs in the various countries of the Commonwealth, and from others too numerous to mention by name. Individual acknowledgement must, however, be made of the substantial help obtained from Sir George Sansom, H.M. Commercial Counsellor in Japan; Sir Atul Chatterjee, member of the Council of India; Mr. J. Jewkes, Manchester University; Mr. R. W. Lacey, of the Joint Committee of Cotton Trade Organizations; Mr. Bernard Ellinger; Miss Freda Utley, and Mrs. N. M. Windett.

To these and many other advisers, including the International Labour Office, Geneva, and a number of business firms with special knowledge of the countries dealt with in the book, is largely due such success as may have been obtained in avoiding serious errors of fact or of emphasis.

The study was greatly facilitated by the abundant data accumulated during the last eight years by the Institute of Pacific Relations itself and by its component national units. Most valuable material was available both in numerous monographs on economic and social questions relating to the countries of the Pacific and in the Institute's major publications, particularly the series of past Conference records, printed under the title of *Problems of the Pacific*, and the *Economic Handbook of the Pacific Area* issued last year.

ASTOR

*Vice-Chairman of the Council of the  
Royal Institute of International Affairs*

CHATHAM HOUSE,

ST. JAMES'S SQUARE, S.W. 1.

*August 1935.*

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## INTRODUCTION

THE emergence of Eastern countries as large-scale industrial producers, their entrance into international markets, the loss of these markets to the manufacturing countries of the West, and the reaction of the latter in the form of trade restrictions in colonial territories have caused a substantial addition to the world's economic problems of to-day.

To Great Britain, in common with other Western manufacturing countries, Eastern competition has brought regional unemployment, labour transference difficulties, problems of industrial reform, and other economic and social corollaries of a shrinkage of export trade. Japan is faced on the one side with pressure of population, and on the other with obstacles to commercial expansion through the progressive closing of the door to her exports which is taking place in many of the markets of the world. China is becoming her own supplier of the classes of goods in which she formerly offered a large market to the West. India—a half-way house—finds herself drawn into conflict with the manufacturing interests both of the East and the West through fostering home industries to relieve the poverty of her masses.

The more immediate problems relate to the progress of Japan, who, by reducing her costs of production to a level hitherto unknown, has extended her trading operations in every quarter of the globe and invaded and captured markets which, in the past, had been the cherished preserves of the exporting countries of the West.

Coinciding with world economic depression, the growth of Eastern competition has in one trade at least, namely that in cottons, produced results which for the Western countries concerned have been little short of catastrophic. In view of the success of Japan—with India and China threatening to follow suit—in outdoing the West in the cheap manufacture of cotton goods and not a few other staple articles of trade, it becomes a question of primary



importance to know what limits are fixed to the competitive power of Eastern manufactures *vis-à-vis* those of the West. Will there be a redressing of the balance, or has the West to expect an extension of competition resulting in a further displacement of trade? Is the Eastern factory worker destined, in fact, to supplant the Western operative in ever-widening spheres?

In this connexion much has been said and written about the industrial advantage which Eastern countries derive from a low standard of life, resulting in cheap wages. The weighing-up of comparative costs of labour, of the effect of low wages upon competitive power and of their real importance as an international factor, together with judgement on the question as to whether present differences of standards are likely to be maintained, presents, however, an exceedingly complex task, and the determinant facts, if ascertainable at all, can only be reached by a thorough study of conditions in the individual countries. There are, moreover, a number of other factors—economic, social, and political—which count no less than relative labour costs in deciding competitive power and in directing the trend of development in each of the countries concerned. It is the study of all these essential factors affecting industrial progress which constitutes the substantive part of this book.

The method pursued for this purpose is that of analysing in turn the industrial structures of the three Eastern countries whose industrial development is on the largest scale, namely Japan, China, and India, and by attempting to deduce from the facts the lines of their future development. The industrial development of the East having been thus reviewed, its effect on the West is illustrated by an examination of the British export industries affected by competition, and by a general appreciation of the effect on the national economy of Great Britain of the loss of her overseas markets. Finally, conclusions arising out of the study as a whole are presented by Professor Gregory in the concluding chapter of the book.

Primarily, therefore, the subject is dealt with in this

work from the competitive angle. This should not be thought to imply the assumption that industrial progress in Japan, India, or China—even premissing the continuance of the present low costs of production—must of necessity be to the detriment of Western exporting countries. To equate the two as if the growth of the one involved a proportionate contraction of the other would be an obvious error. To take the instance of Japan, her low-priced manufactures have already, in Africa and elsewhere, opened up new markets which, but for this, might have lain dormant for a very long time to come, offering little or no field to the higher-priced goods of the West. From the profits of such trade Japanese purchasing power must in its turn benefit, thereby stimulating imports both of the raw materials needed by Japanese industries, and also of manufactured goods, both ‘capital’ and for consumption, of kinds which Japan is not well fitted to produce. Again, Japan is at present regulating her trade with a view to correcting her adverse balance of trade and is concentrating on exports, but if these continue to grow a proportionate increase of imports must occur in the long run, the more so because Japan depends largely on foreign sources for raw materials required for manufacture. The growth of Japanese industry should, then, eventually benefit the trade of the world, though this obviously does not preclude very injurious results for individual countries with whom she stands directly in competition. For a properly balanced view such long-term aspects of Eastern industrialization need, of course, to be kept in mind when the more immediate problems arising from competition are being discussed.

The urgency of these problems has meanwhile already become great, and we have seen diverse attempts being made to deal with the situation on both the international and the domestic plane. The Indo-Japanese Trade Convention of 1933, the negotiations between Japan and Great Britain during the same year, and the parleys conducted by Japan with the Netherlands East Indies and with Australia are examples of efforts at a solution from the

international side, while unilateral action has taken the form of quota and tariff restrictions, Government control of exports, as instituted in Japan, and schemes of industrial reorganization such as have lately been introduced in the Lancashire cotton trade. But the measures hitherto taken have been, at the best, partial. While competition continues—and it appears likely not only to continue but to intensify in certain markets at least—the search for remedies must proceed. Varied suggestions have been made, including the division of markets by international agreement, the regulation of export prices, rationalization of production according to type and quality, and the specialization of industry within individual countries. To judge aright the merits of such proposals and to discover the line of action best calculated to succeed requires knowledge of conditions and trends in the various industrial centres. It is the aim of the present volume to add to this knowledge. Existing sources of material are inadequate to support conclusions of a definite sort. Other researches in the same field are, however, in progress and the study will be further advanced by discussion at the forthcoming Conference of the Institute of Pacific Relations, to which, as already mentioned, the present volume serves as a contribution from a British point of view.

# I

## JAPANESE COMPETITION IN WORLD MARKETS



ASIA  
HYPER

# JAPANESE COMPETITION IN WORLD MARKETS

## 1. GENERAL SURVEY

WHILE in the long-term study of Eastern Industrialization which occupies the greater part of this book India and China share our attention with Japan, interest concentrates on the last of these three countries when we are dealing with the current state of affairs in regard to trade competition in international markets. The present chapter, therefore, will be mainly confined to an examination, from a Western view-point, of the nature, extent, and geographical extension of Japanese competition in the principal markets of the world where her manufactures compete with those of Great Britain and other countries of the West.

This competition, it is well to emphasize at the start, is no novel feature of international trade peculiar to the last decade. Contrary to a frequently held belief, Japanese exports taken as a whole have gained comparatively little in annual value since the War, and the increase in Japan's share of the world's export trade has been only a moderate one. The share of her exports in the world's export trade, expressed in gold values, has only increased from 2.93 per cent. in 1929 to 3.62 per cent. in 1936 and this increase has been balanced by a parallel rise in Japan's share of the world's import trade from 2.8 per cent. in 1929 to 3.56 per cent. in 1936:

### JAPANESE TRADE IN RELATION TO WORLD TRADE

<i>Imports</i>							
	<i>1929</i>	<i>1931</i>	<i>1932</i>	<i>1933</i>	<i>1934</i>	<i>1935</i>	<i>1936</i>
% of world total	2.80	2.83	2.92	3.04	3.31	3.38	3.56 <sup>a</sup>
<i>Exports</i>							
	<i>1929</i>	<i>1931</i>	<i>1932</i>	<i>1933</i>	<i>1934</i>	<i>1935</i>	<i>1936</i>
% of world total	2.93	2.89	2.82	3.13	3.33	3.62	3.62 <sup>a</sup>

<sup>a</sup> Provisional figures.

#### 4 JAPANESE COMPETITION IN WORLD MARKETS

The intensity with which Japanese competition has in recent years threatened the trade of older manufacturing countries owed a great deal to qualitative, as opposed to quantitative, causes. The steady transition from the production of foodstuffs and raw material to the output of finished manufactures for export,<sup>1</sup> the persistent reduction of export prices, the spread of export activity beyond the Pacific area, and the increase in the *relative* volume of exports in a period of universal depression have been in the recent past more potent sources of anxiety to Japan's industrial competitors than any startling increase of productivity per head of population.

Japan's competitive strength, moreover, was emphasized by the fact that she succeeded in maintaining, and even increasing, the ratio of her export trade to the volume of domestic production during a period when most other countries were suffering from the opposite tendency:

	<i>Index of industrial production</i>	<i>Volume of exports</i>
1929	100.0	100.0
1930	94.8	88.3
1931	91.6	91.0
1932	97.8	107.6
1933	113.2	119.0
1934	128.7	140.6
1935	141.8	159.6
1936	153.0	174.4

It has also to be remembered that the countries that have suffered most by the expansion of Japan's exports are not, in the main, those which have benefited from an increase of Japan's imports, since her increased imports have been mostly of raw material to the advantage of those countries which are primary producers, while her increased exports have been mainly of manufactures to the detriment of industrial producers.

To illustrate two of the most immediately important

<sup>1</sup> See table on p. 6, below.

# JAPANESE COMPETITION IN WORLD MARKETS 5

of the above-mentioned factors in Japanese competition figures are given here which show how the quantum of Japanese trade, though reduced by the world depression, declined less than that of world trade in general, while at the same time the (gold) prices at which Japan has marketed her exports were lower than the average for all countries.

	1929	1930	1931	1932	1933	1934	1935
Quantum of world exports	100	93.0	85.5	74.5	75.5	78.5	82.0
Quantum of Japanese exports	100	88.3	91.0	107.6	119.0	140.6	159.6
Price index (gold) of world exports	100	87.0	67.5	52.5	46.5	43.0	42.0
Price index (gold) of Japanese exports	100	82.8	62.2	35.3	31.6	27.5	26.9

Too much importance should not be attached to the absolute movements of these indices. The trend, however, is unmistakable: over the whole period 1929-35 the volume of world trade fell by roughly one-fifth, while the volume of Japanese trade rose by roughly three-fifths. On the other hand the Japanese export price-level fell far more heavily than the average price-level for world exports, and has remained on a lower level.

To elucidate two other essential factors, namely the change in the character of Japanese exports and the invasion of new markets, let us rapidly glance at the course of developments since the Great War. As will be shown later in this volume, Japan emerged from the War with a greatly increased export trade, mainly as a result of the exclusion of Western supplies from Asiatic countries during the war years. As the pre-war channels of trade were once again reopened, these gains were to a great extent forfeited, but a fresh period of expansion from 1923 to 1925 more than restored Japanese exports to the position held in 1919. This level was not fully maintained during the next four years; in 1930 and 1931, after the outbreak of world depression, came two years of slump, to be succeeded by a renewed recovery in 1932 and the years



## 6 JAPANESE COMPETITION IN WORLD MARKETS

which followed. These movements can be seen from the following figures:

### VALUE OF JAPANESE EXPORTS

(In million yen)

1913 . . .	632.5	1929 . . .	2,148.6	1934 . . .	2,171.9
1919 . . .	2,098.9	1930 . . .	1,469.9	1935 . . .	2,499.1
1921 . . .	1,258.8	1931 . . .	1,147.0	1936 . . .	2,693.0
1925 . . .	2,305.6	1932 . . .	1,410.0	1937 . . .	3,175.4
1928 . . .	1,972.0	1933 . . .	1,861.0		

A very definite change is discernible in the composition and direction of these exports. In a subsequent chapter we shall examine these changes in relation to their influence on the direction of Japan's future industrial development, but some description of them is needed here in order to throw light upon the position which Japan has won for herself in international markets at the present time.

Formerly the staple of the Japanese export trade was raw silk, but in the post-war period exports of semi-manufactures, which include raw silk, have fallen continuously in importance, and have been replaced by exports of finished manufactures as indicated below:

### COMPOSITION OF JAPANESE EXPORTS

	<i>Foodstuffs per cent. of total exports</i>	<i>Raw materials per cent.</i>	<i>Semi-manu- factures<sup>a</sup> per cent.</i>	<i>Finished goods per cent.</i>	<i>Others per cent.</i>
1914	10.8	7.7	51.8	28.4	1.3
1922	10.7	5.2	38.6	43.5	2.0
1928	7.9	4.5	41.8	41.2	4.6
1929	7.4	4.1	41.1	43.6	3.8
1930	8.8	4.4	35.7	47.0	4.1
1931	8.9	3.9	36.9	46.5	3.8
1932	8.1	3.7	35.6	51.3	1.3
1933	8.7	4.0	29.4	56.3	1.6
1934	7.9	4.4	23.0	62.0	1.3
1935	7.9	4.4	26.9	58.1	2.7
1936	7.6	4.7	26.6	58.1	3.0
1937	7.4	4.4	26.4	59.0	2.8

<sup>a</sup> Includes raw silk.

The full significance of this transition to 'finished' exports did not become apparent until about 1930. Up to that period Japan was still largely in a state of capital development, building up reserves of capital, productive capacity, and technical and managerial skill. Though that chapter in her evolution cannot be regarded as yet entirely closed, from 1930 onwards the completion of certain parts of her new productive machinery has been returning a dividend in the shape of increased exports of manufactured goods. Among these the enormous expansion in textile exports has tended to overshadow the development of smaller lines of manufactures. The growth in the export of Japanese cotton piece-goods, compared with that of Great Britain and other countries, has been as follows:

JAPANESE SHARE IN WORLD COTTON PIECE-GOODS  
EXPORTS

(In 1,000 quintals)

	1928	1929	1930	1931	1932	1933	1934	1935	1936
United Kingdom .	3,248	3,140	2,115	1,518	1,944	1,778	1,770	1,760	1,811
Japan . . .	1,419	1,791	1,572	1,414	2,032	2,090	2,577	2,725	2,710
Others . . .	3,223	3,352	2,672	2,394	1,993	1,769	1,652	1,673	1,766
World . . .	7,890	8,283	6,359	5,326	5,969	5,637	5,999	6,158	6,287
Japanese per cent. of world	18	22	25	27	34	37	43	44	43

Meanwhile the expansion in other lines may be coming to prove little less important. Table I<sup>1</sup> illustrates the recent increase in volume and value of the export of a number of Japanese manufactures less important individually than cotton but in the aggregate substantial.

Accompanying the increase in the range of manufactured exports already remarked upon there has been a widening in the range of markets served. For a long time by far the greater part of Japanese exports went to Asiatic and Pacific markets and there the pressure on Western competitors was not very acute so long as other markets were expanding. Recent years have seen the spread of

<sup>1</sup> See p. 381, below, and for Japanese and British exports of cotton goods see Table III, p. 383.

Japanese activities to a much wider area. Viewed quantitatively the new trade in many cases is still comparatively small; it is the rapidity with which the advance took place, the fact that it coincided with a severe contraction of overseas markets as a whole, and finally the threat which it implied to old established interests—whether of the mother-country, as in colonial areas, or of rising domestic industries, as in the case of India—that lent it so much gravity.

Here let us turn aside to give momentary attention to certain facts and circumstances connected with the development of Japanese trade competition which are of importance for seeing the situation in correct focus. Japan's invasion of new markets, which has proved so disturbing to industrial interests in the West, has been largely the result of events which robbed her temporarily at least of some of her older overseas custom. The collapse of the American demand for raw silk, which as a luxury article was exceptionally heavily hit by the economic distress, reduced enormously Japan's most important single export and converted her trade with the United States from a 'favourable' to an 'unfavourable' basis. In China, again, which was Japan's most important market, a slump in purchasing power, due partly to silver depreciation, combined with a political boycott of Japanese goods, produced a decline in Japan's exports to China of more than 60 per cent. as between 1928 and 1933. This again affected Japan's balance of payments and provided a powerful stimulus to the search for new fields for exports, a stimulus which, it should, however, be noted, declined in strength with the dying-down of the boycott and the recovery of Japanese exports to China.

Another fact which deserves attention is that the low price of Japanese export goods cannot be attributed either to a deliberate dumping policy or to an economic necessity to sell 'at all costs'. The recent profits of Japanese industrial enterprises manufacturing for export give evidence of this, as may be seen from the following figures compiled by the Mitsubishi Economic Research Institute:

## PROFITS ON JAPANESE INDUSTRIAL INVESTMENT

	<i>Profits as percentage of paid-up capital</i>		
	<i>1930-1 average</i>	<i>1933</i>	<i>1936</i>
Cotton-spinning .	5.8	9.1	17.3
Cotton-weaving .	1.4	13.7	<sup>a</sup>
Rayon . . .	8.6	19.5	12.9
Shipping . . .	8.2	0.6	10.2
Ship-building . . .	0.6	1.5	7.1
Steel . . .	1.6	14.5	16.2
Machinery . . .	1.5	6.7	19.1

<sup>a</sup> Figures not available.

To turn back to the general consideration of the situation created by Japanese export expansion in world markets, let us first look at the effects of the change in the direction of Japanese trade since 1928. Table II<sup>1</sup> shows the trend in relation to countries grouped according to continents. The fact of interest which emerges from a study of this table is the paramount importance of Asiatic markets (exports to the United States stand in a special category, consisting, as they do, largely of raw silk). It is true that exports to a number of newer markets in other continents doubled in the period 1929-34, as in the case of South Africa, East Africa, and Latin America, and the rising importance of these markets compared with Asiatic and Pacific countries became very apparent. As yet, however, these markets do not constitute a vital proportion of the total Japanese export market—a fact which is considered by some observers to render more hopeful the prospects of a workable settlement of the problem of competition with Western exporting countries by means of a geographical allocation of markets.

Since 1934 the expansion of Japanese exports has been hindered by the general extension of restrictions on her trade, such as special tariffs (as in Egypt), quotas (as in the British colonies), and exchange restrictions (as in the South American countries), all of which, whether

<sup>1</sup> See p. 382, below.

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intentionally or not, tend to hit Japan with special force.<sup>1</sup> These restrictions have prevented Japan's exports to the markets affected (taken as a whole) from expanding beyond their 1934 level, although her exports to other markets not affected by restrictions have since that year increased considerably. This is illustrated in the following table:

JAPANESE EXPORTS TO 'FREE' AND 'RESTRICTED' MARKETS  
(In million yen)

	1934	1935	1936
To free markets <sup>a</sup> . . . . .	1,183	1,432	1,632
"    "    as percentage of total . . . . .	56%	61%	65%
To restricted markets . . . . .	924	905	897
"    "    "    as percentage of total . . . . .	45%	39%	35%
Total <sup>b</sup> . . . . .	2,106	2,336	2,529

<sup>a</sup> i.e. markets in which no measures were taken which had the effect (intentionally or otherwise) of discriminating against Japan *at any time* during the period. Thus the same countries are included in the figure for each of the three years.

<sup>b</sup> These totals differ from the figures given on p. 6 as the total value of Japanese exports, because they exclude countries for which figures or other information required for the purpose of the present table are not available.

The extent to which restrictive measures in so many world markets have acted as a check or a diverting influence on Japanese trade expansion is strikingly illustrated by these figures.

After this general discussion of Japanese trade competition we will now proceed to analyse the position in the principal individual markets.

### 2. INDIVIDUAL MARKETS

#### (1) NETHERLANDS EAST INDIES

While the most rapid advance of Japanese exports has taken place in the markets of the British colonies, it was in

<sup>1</sup> Exchange restrictions are usually designed to increase a country's favourable, or diminish her unfavourable, balance of trade; and since most countries import more from Japan than they export to her, they naturally attempt to rectify the balance by cutting down their purchases from her.

the Netherlands East Indies that Japan achieved her most substantial increase of trade. The simple demands of a large and primitive native population presented an especially favourable opportunity to Japan owing to her geographical advantage. The opportunity was made even more favourable by the colonial policy of the Netherlands Government, traditionally the most liberal in the world, which asked no preference for the industries of the mother-country and left colonial markets open to all comers. Up to 1932 Holland was, somewhat naturally, the largest supplier of imports to her East Indian colonies, but the proportion was never very high; Great Britain—both directly and through Singapore—Germany, the United States, and India, as well as Japan, all found a profitable market in the Netherlands Indies. But while imports from the other countries declined heavily after 1930, those from Japan maintained their level and the Japanese share in the total increased from 11.6 per cent. in 1930 to 16.4 per cent. in 1931, 21.2 per cent. in 1932, and 31.0 per cent. in 1933. Imports from Japan in 1933 remained in value almost at the 1930 level, while imports from Holland had fallen by 75 per cent., from Great Britain by 60 per cent., from Germany by 70 per cent., and from the United States by 80 per cent. This result was achieved in spite of the fact that a large proportion of the retail trade in this area is handled by Chinese shopkeepers, many of whom supported the Chinese boycott of Japanese goods. Increased duties imposed during 1932—primarily for revenue purposes—had no effect in curtailing imports from Japan, and in September 1933, by virtue of the Crisis Import Ordinance, the Governor-General of Batavia was empowered against all precedent to introduce an emergency import quota system. Imports of the various categories of cotton textiles and mixtures have accordingly been regulated by a number of quota enactments since the beginning of 1934. Previously, action had been taken to protect the native industries producing cement and beer, and under the new ordinance the control of the import of these commodities was further restricted. In

general, the quota system has been applied with moderation and the share of the import trade reserved for manufacturers in the Netherlands is relatively modest. Meanwhile Japan had already captured a very large proportion of the trade in all the lines she is competent to supply, while the pressure of native demand for cheap goods—especially strong on account of the comparatively high cost and low standard of living—is a deterrent to further Government measures for the limitation of her imports.

Nevertheless, the effect of the quotas in increasing the Dutch share of the trade from the low level it had reached in 1933 has been evident. Pressure from British interests led to the replacement of the 'global quota' for all non-Dutch exporters (under which there was free competition between British and Japanese goods for that part of the trade which was not reserved to Holland) by specific quotas for each exporting country. These applied only to the finer goods—it is an object of policy of the Government of the Dutch East Indies to keep the coarser goods cheap—and their effect has been to increase Great Britain's exports of such goods, while her trade in grey tissues has continued to decline.

Japan showed a realization of the necessity of placing her trade with the Netherlands Indies on a reciprocal basis, following the precedent set in her agreement with India. This she could conveniently do, being a large importer of tropical products such as oil, rubber, and sugar. Negotiations for a trade agreement on such lines proved abortive, but Japan has since 1933 greatly increased her imports from the Dutch East Indies. In 1933 Japan's exports to the Netherlands East Indies totalled 157 million yen, and her imports therefrom 56 millions, the balance in Japan's favour being thus 101 millions; in 1936 her exports were 129 millions, her imports 114 millions, the balance in her favour being thus reduced to 15 millions.

Between 1930 and 1933 Japan increased her share in the import trade of the Netherlands East Indies from 11½ to 31 per cent. at the expense of all other competitors,

whose percentage share diminished in every case. After 1933, however, the effect of the quota system can be seen in the decline of Japanese exports to the Netherlands East Indies from 98 million guilders in 1933 to 75 millions in 1936, her proportion of total imports falling from 31 to 27 per cent.<sup>1</sup>

The figures for imports of all sorts are given in Table IV, while Tables V, VI, and VII<sup>2</sup> show the extent of Japanese competition in certain of the more important products, the case of cotton textiles being especially striking when the Japanese imports are compared with those from the United Kingdom, and from Holland, the mother-country. In view of Japan's geographical advantage there is some ground for regarding this trade (in the coarser qualities at least) as irrevocably lost to Western manufacturers.

## (ii) CHINA

Up to a few years ago a feature of the foreign trade of China had been the progressive advance of Japanese industrial imports at the expense of the Western nations. This applied to the period when cotton goods were the staple of Chinese trade in manufactured articles. The trend of development from 1931 onwards has been obscured by the influence of several outstanding factors, the loss of Manchuria, the impoverishment of the Chinese population, the boycott of Japanese goods, and currency fluctuations. In so far, however, as the cotton trade is concerned, the recent tendency has been towards the steady elimination of foreign imports as a whole, Japanese and Western alike, through the growth of the domestic industry<sup>3</sup> and the protection afforded by a rising import

<sup>1</sup> In September 1936, after a six-year struggle, Holland and her colonial empire devalued their currencies, and with the end of deflation and the world rise in raw-material prices the prosperity of the Dutch East Indies increased so much that imports from all countries, Japan included, rose considerably in 1937. For the eight months January–August 1937 imports from Japan amounted to 89 million guilders (cf. 75 millions for the whole of 1936), which represented 28 per cent. of total imports.

<sup>2</sup> See below, pp. 384–5.

<sup>3</sup> The part played by Japanese-owned mills in China's domestic cotton industry is dealt with in the China section of this book.



tariff. The correspondence between the general decline of foreign imports and the expansion of native factories is considered later in the section dealing with China;<sup>1</sup> here it need only be noted, as a measure of the extent to which China is at the present time supplying her current needs of imported cotton textiles, that her imports of cotton cloth, which were once at the head of the list, now represent only 1.3 per cent. of her total imports.

This decline in imports of cotton piece-goods has hit Japan with special force. In 1929 Japanese exports to China totalled 288 million yen, of which 150 millions were accounted for by cotton piece-goods; in 1936 Japanese exports to China were 160 millions, of which only 8 millions were cotton piece-goods. Thus the falling-off in the cotton-goods trade more than accounts for the fall in Japan's exports to China; in fact her exports of goods other than cottons rose in value from 138 million yen in 1929 to 152 millions in 1936.

Thus China differs from nearly all other markets for Japanese goods in that the part played by cotton piece-goods is nowadays very small and is still further diminishing.

In the first half of 1937 Japanese exports to China amounted to the very high figure of 125 million yen (cf. the figure for the first half of 1936, 67 millions) and formed 19 per cent. of China's total imports. Then in August came the war, and trade between the two countries fell to a very small proportion of its former dimensions; its future will depend on the issue of the war, which is at present unpredictable.

### (iii) BRITISH INDIA

Japan's share in the import trade of British India was greatly increased by the War, but it was not until 1931-2 that she supplied more than 10 per cent. of India's import requirements. Over the same period Great Britain's share fell from 64.2 (1913-14) to 35.3 per cent. (1931-2), a change which was brought about not only by Japan's entry

<sup>1</sup> See below, p. 185.

into this market on a large scale, but also by increased competition from other manufacturing countries, in particular the United States.

Japanese competition in the Indian market takes a very similar form to that in the Netherlands Indies. As the subject is reverted to somewhat fully in the section concerning India, it need only be dealt with summarily here. Table VIII<sup>1</sup> shows the principal articles in which Japanese manufacturers are interested and the principal countries with which they compete.

During the five years 1929–34 a feature of Indian trade was the decline of imports. This was due mainly to three causes—rising tariffs, diminished internal purchasing power, and the extension of Indian domestic industries. Had the rising tide of Japanese competition in India coincided with a rising total demand, it would have been less severely felt by competitors; but it was unfortunately otherwise. Foreign imports as a whole were adversely affected by a continually rising level of customs duties, for which the pressure of Japanese imports was partly responsible, although budgetary difficulties and the desire to protect infant industries were also among the causes.<sup>2</sup> The duty on cotton piece-goods of non-British origin was raised, for instance, four times between 1930 and August 1932, and in June of the following year reached an average level of 75 per cent. *ad valorem*. Owing to the existence of a ‘most-favoured-nation’ clause in the current Indo-Japanese trade agreement, these increases were of general application and had disastrous effects on the imports of foreign competitors with higher production costs than Japan. In her case no increase in tariffs served to stem the flood of Japanese imports and the outcome was the denunciation of the current treaty and the conclusion of a new one after protracted negotiations in January 1934, regulating Japanese cotton piece-goods imports on a barter basis. Under the new agreement, the tariff was lowered and the sale by Japan of 325 million yards of piece-goods

<sup>1</sup> See p. 386, below.

<sup>2</sup> India's tariff development is dealt with on pp. 262 et seq.

was made conditional on a simultaneous purchase of 1 million bales of Indian raw cotton; sales above the basic quota were permitted at the rate of an additional 1 million yards for every additional 10,000 bales of Indian cotton purchased.<sup>1</sup> The effect of this was to transfer trade from the Japanese to the domestic producers, since the tariff remained too high for other manufacturers to surmount. On the other hand, the exclusion of rayon goods and rayon-cotton mixtures from the agreement left Japan a loop-hole of which she made full use. In 1937 the agreement was renewed with slight modifications.

The check to the expansion of Japanese exports of cotton piece-goods to India has not prevented a continued decline in the sale of British goods. Thus, while Japanese exports of piece-goods, which had reached a total of 579 million yards in 1932-3, dropped to 417 million yards in 1936-7, in the same period British exports fell from 586 to 334 million yards. The reduction in duty on certain British goods from 25 to 20 per cent. in 1936 has not availed to arrest the fall. The relative position in regard to cotton piece-goods imports as a whole and in regard to the most important individual categories is shown by the following figures:

## IMPORTS INTO INDIA

(In million yards)

		1932-3	1933-4	1934-5	1935-6	1936-7
All cotton piece-goods:	Total	1,193	761	944	947	764
From United Kingdom	.	586	415	552	440	334
„ Japan	.	579	341	374	496	417
White:	Total	356	230	285	263	220
From United Kingdom	.	111	88	237	200	164
„ Japan	.	244	142	40	58	48
Coloured:	Total	413	262	361	352	282
From United Kingdom	.	281	184	213	155	117
„ Japan	.	120	75	140	191	161
Grey:	Total	425	269	298	332	262
From United Kingdom	.	194	142	103	85	53
„ Japan	.	214	124	194	245	208

<sup>1</sup> The terms of the Indo-Japanese Cotton Agreement are set out more fully on pp. 286-7, below.

The export to India of artificial-silk piece-goods has for some years been almost a Japanese monopoly in spite of the fact that Japanese goods pay a duty of 50 per cent., and British goods only 30 per cent. Thus in 1932-3, the peak year for this trade, Japan provided 112 out of a total import of 113 million yards. The figures for 1933-4 showed a decline of about 60 per cent., since when there has been a gradual recovery to something near the 1932-3 level; in 1936-7 Japan supplied 101 out of a total of 102 million yards.

#### (iv) EGYPT

It is interesting to compare the course of events in India with recent developments in Egypt. Japanese goods obtained an early foothold in this market and have made it a kind of advanced base for operations in all North African markets. Japanese exports to Egypt increased from 23 million yen in 1926 to 73 millions by 1934. The greater part of this total (47 millions) was composed of cotton textiles. This flood of Japanese imports alarmed the Government, on account of the effects on the domestic industry and on the balance of trade. As the Japanese cotton industry is turning over increasingly to finer counts, its demand for Egyptian cotton tends to increase, and it would seem that the trade relations between the two countries could well be based on an agreement similar to that between Japan and India. Negotiations for an agreement were in fact conducted in 1935 and 1936, but proved abortive. Meanwhile in September 1935 the Egyptian Government imposed a depreciated-currency surtax of 40 per cent. on Japanese cotton and rayon goods. At first the chief result of this measure was to transfer trade from Japan to Great Britain, but after a year domestic production had begun to replace British goods. It seems likely that with the exception of the higher-class articles the consumption in Egypt of cotton piece-goods will eventually be met wholly by local production.

Japan's imports of raw cotton from Egypt have risen in value from an inconsiderable value in 1929 to 19 million

yen in 1933 and to 39 million yen in 1936. The combined effect of the surtax on Japanese goods and the increase in Japanese imports of Egyptian cotton was to change a balance of trade of 30 million yen in Japan's favour (1933) to a balance of 5 million yen in Egypt's favour (1936).

#### (V) THE BRITISH EMPIRE

Within the British Empire Japanese competition has, on the whole, been felt more severely in colonial territories than in Great Britain itself or the Dominions, where for the most part prompt action by tariffs and other methods has been taken whenever a rapid influx of Japanese goods has been threatened. Japan supplies barely 1 per cent. of the imports of Great Britain or Canada and 6 per cent. of the imports of Australia, while an incipient attack on the South African market was checked by the anti-currency-depreciation tariff of 1932 and by the Ottawa Agreements. At the same time Japan is an important buyer of the products of Canada and Australia, and has a proportionately large adverse balance of trade with each of them. The progress made up to the present by Japanese goods imported into Great Britain and Australia is shown by Tables IX and X.<sup>1</sup>

British anxiety concerning Japanese competition in the Dominions centres therefore less in the existing position than in the trend of development, which may result in a very different future position. Though they were among the first to take tariff action against Japanese goods, the Dominions are now finding better prospects for the sale of their agricultural surplus to the growing populations of the East than to the almost stationary populations of the West. There is no doubt that this fact is giving rise to a conflict between apparent economic expediency and racial and national loyalties which will only be reconciled with difficulty. The tendency for Australia in particular to be drawn economically into the orbit of Japan and away from that of the mother-country may well create an imperial problem of major importance.

<sup>1</sup> See p. 388, below.

It is not unnatural that Japanese goods should have met with more success in the relatively undeveloped colonial markets. In the first place they have not to compete there with the established interests of domestic industries; secondly, their low price, even when combined with low quality, appeals to populations with a purchasing power that is low at all times and has been further reduced in recent years by depression. It is, in fact, surprising to note the extent to which the total consumption of these areas was maintained during the depression period in spite of considerably reduced purchasing power. Japanese industry, by reason of the low prices at which it can sell its products, tapped new low levels of demand which Western manufacturers, with their higher production costs, have been unable, and continue to be unable, to satisfy. For this reason, the effect of the colonial quotas established in 1934 has been a reduction in imports of Japanese goods much greater than the increase in imports of British goods.

Following the break-down of the Anglo-Japanese negotiations for an apportionment of world markets by agreement in the spring of 1934, the British Government took the step of instituting quotas for cotton and rayon textile imports in all Crown Colonies, where possible, from May 7th, 1934. By the middle of July the necessary legislation had been passed in nearly every Crown Colony. In the West African colonies—Nigeria, Gold Coast, Gambia, and Sierra Leone—the quotas were applied to textile imports from Japan only. This was made possible by the fact that the most-favoured-nation agreement with Japan with regard to West Africa had been denounced. In Ceylon, British Malaya, Mauritius, British Somaliland, the West Indies, Cyprus, Malta, and the Pacific colonies, imports of textiles from all foreign countries were subjected to regulation by quota. Only in the important East African colonies was no action taken, since the Open Door is maintained in the Congo Basin by the pre-war treaty of Berlin.

Although they differ as to detail in the way in which they are applied, the quotas were all fixed on the basis of

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imports in the period 1927-31. For this reason they are in most cases very much lower for Japan than her actual shipments in 1932 and 1933. For instance, the quotas fixed for the full year 1935 for Japanese textiles entering the Straits Settlements and Ceylon compare as follows with the actual figures for the immediately preceding years:

(In million yards)

	<i>Quota</i> <sup>a</sup>	<i>Actual imports</i>					
	1935	1929	1930	1931	1932	1933	1934
Straits Settlements	34.7	29.5	44.6	41.3	82.2	90.4	95.2
Ceylon . . .	12.8	8.2	13.4	23.7	40.4	41.4	52.2

<sup>a</sup> Including rayon.

The immediate consequences of the introduction of the quota—the drastic fall in imports from Japan, and the considerable but much smaller rise in imports from Great Britain—are illustrated in the following figures of imports of rayon piece-goods into Jamaica in 1934. The quota came into operation in June.

IMPORTS OF RAYON PIECE-GOODS INTO JAMAICA DURING  
1934

	<i>United Kingdom</i>	<i>Japan</i>	<i>United Kingdom</i>
	(in thousand square yards)		proportion of total (per cent.)
January . . . .	2	246	0.8
February . . . .	..	263	..
March . . . . .	8	440	1.8
April . . . . .	3	509	0.6
May . . . . .	9	564	1.5
June . . . . .	9	193	4.0
July . . . . .	20	13	37.7
August . . . . .	44	11	50.0
September . . . .	73	8	71.6
October <sup>a</sup> . . . . .	14	46	10.5
November . . . . .	138	23	52.8
December . . . . .	147	12	78.2

<sup>a</sup> The break in the trend in October may be due to large Japanese shipments in excess of the quota imported on payment of a heavy additional duty.



In this connexion it is illuminating to compare the textile imports during the last three years of Kenya and Uganda on the one hand, and Malaya and Ceylon on the other—a comparison which has been effectively drawn in the following passage, quoted from a recent publication, of 'Political and Economic Planning'.

'In Kenya and Uganda, where the Open Door is maintained of necessity under the terms of the Congo Basin Treaties, imports of cotton textiles increased from  $52\frac{1}{2}$  million yards in 1934 to  $60\frac{1}{2}$  million yards in 1936. Imports from Japan increased from 45 million yards in 1934 to 54 million yards in 1936; imports from the United Kingdom fell from nearly 5 million yards in 1934 to  $3\frac{3}{4}$  million yards in 1936. In Ceylon, where the quota system is in force, cotton textile imports fell from 78 million yards in 1934 to 66 million yards in 1936; Japan's share fell from 33 million yards in 1934 to 10 million yards, but imports from Lancashire increased only by 20 millions—from 12 millions in 1934 to 32 millions in 1936; and imports from all sources other than Japan fell by 8 million yards. Similarly in Malaya, where quotas are also in force, cotton textile imports fell from 146 million yards in 1933 and 144 million yards in 1934 to 104 millions in 1935. Between 1933 and 1935 imports from Japan fell by  $45\frac{1}{2}$  million yards (from  $99\frac{1}{2}$  millions to 54 millions), but imports from the United Kingdom increased only by  $7\frac{1}{2}$  million yards (from 26 millions to  $33\frac{1}{2}$  millions) and imports from all sources other than Japan by  $3\frac{1}{2}$  million yards.'<sup>1</sup>

The figures for West Africa show a different tendency. Here British exports have increased by more than the fall in Japanese exports owing to the rise in world prices of palm oil, palm kernels, ground-nuts, and cocoa. These are West Africa's chief exports, and the rise in their prices has naturally increased the purchasing power of the native population, and hence their demand for imported goods.

In view of the multiplicity of customs areas in the Colonial Empire, it has been impossible to examine more than the sample of markets given in Table XI,<sup>2</sup> where the largest and most important in each group have been taken and analysed in respect of imports of cotton piece-goods

<sup>1</sup> 'Political and Economic Planning', *Report on International Trade*, 1937, p. 75.

<sup>2</sup> See p. 389, below.



from Great Britain and Japan respectively. It should not be forgotten that the increase in Japanese exports to these areas has occurred not only in the case of cotton piece-goods, but also of rayon tissues, motor tyres, bicycles, rubber shoes, pottery and glass, and a number of other miscellaneous manufactures. It is competition in cotton goods, however, which has caused the largest repercussions.

From the figures given in the table a number of tentative conclusions can be drawn. In the first place, although it grew at an alarming rate, Japanese competition in West Africa and the West Indies did not succeed in capturing a large proportion of the market. But in view of the rapidity of Japan's advance, competing manufacturers may be excused for having displayed considerable anxiety about her future progress in these markets.

Again Japan's early success in East Africa is ample evidence of the appeal of cheap Japanese goods to primitive populations; in fact not the least striking feature of these figures is the extent to which the total volume of consumption has been maintained, and in some cases more than maintained, in spite of the catastrophic effects of the fall in the price of raw materials on the purchasing power of consumers. Even in such a relatively well-developed market as Ceylon, it is interesting to find that the quota policy was only introduced in the face of strenuous local opposition and that continued efforts have since been made to secure its abrogation on every available pretext, as, for instance, the fever epidemic of 1934-5. In 1937 certain concessions were made to the opposition in Ceylon. Grey cloth was exempted from the quota, and the quotas in respect of other classes of cloth were increased by 50 per cent., in return for an acceptance by Ceylon of the principle of Imperial Preference. That the influx of cheap Japanese goods is welcome to the consumer is, however, of little comfort to the manufacturer who has formerly supplied that particular market for many years. Further examination of Table V reveals that other foreign textile industries have suffered from Japanese

competition even more severely than Lancashire, which enjoys the advantage of preferential treatment. When the facts are faced it seems unreasonable to hope that under free marketing conditions Western manufacturers can ever regain their supremacy in the sale of low-grade piece-goods in bulk markets, and indeed many manufacturers would seem to have become more or less resigned to this ultimate conclusion.

The quickness with which old commercial connexions have been severed is well illustrated by the analysis of two markets—Tanganyika and Palestine—contained in Tables XII and XIII.<sup>1</sup> These tables show the quantity of piece-goods imported from each principal country in recent years and the average import values. The latter cannot be regarded as other than a rough guide to the extent of Japan's price advantage since there is certain to be some difference in the quality of the materials within the main categories analysed. Even so it is evident that not even the most favourable circumstances of situation and labour costs, such as Egypt enjoys in the Palestine market, and India in Tanganyika, can do more than reduce prices approximately to the Japanese level, while Lancashire goods are undercut by anything up to 60 per cent.

So far, as has been shown, the main pressure upon Western manufacturers has come through the competition of Japanese cotton piece-goods with Western cotton manufactures and that mainly in the lower qualities. The assumption that Lancashire and European manufacturers will not have so much difficulty over a long period in retaining their hold over the better-quality markets is, however, beginning to be shaken by the growing importance of the rayon industry in the Japanese export trade. Low-quality rayon goods from Japan offer a serious threat to established interests in the better-quality market for cottons, a more serious threat, perhaps, than any probable improvement in the average quality of Japanese cotton textiles themselves. Japan, coming late upon the scene,

<sup>1</sup> See pp. 390-2, below.

is developing her rayon exports to an extent that has never been approached by earlier manufacturers, as is shown in Table XIV.<sup>1</sup> It can be seen from the analysis given of the destination of Japanese rayon exports in Table XV<sup>2</sup> that they have been consigned largely to the better-quality markets, for instance Australia, Egypt, Argentine, and Uruguay. Japan's startling and rapid success in this branch is mainly due to the fact that she has adopted an entirely different policy with regard to rayon to that of most Western manufacturers. The latter have concentrated on the development of a very high-quality fabric for supplying the home market; Japan has tended to produce a cheaper quality with a less-specialized appeal.

#### (vi) COLONIAL MARKETS OF OTHER WESTERN POWERS

It is interesting to compare the situation that has arisen through Japanese competition in the colonial territories of the Netherlands and Great Britain with the position in the overseas possessions of another colonial Power, France. It has already been seen that liberal traditions of government and the maintenance until recently of the Open Door have greatly assisted the progress of Japanese goods in both the British Crown Colonies and in the Netherlands Indies. The French colonial system, being entirely different and based on a policy of assimilation, has been far less favourable to Japanese trade expansion. Thus Japanese exports to Algeria, thanks to a high tariff wall, actually decreased between 1930 and 1933 from Fr. 1,208,000 to Fr. 1,088,000, and have remained insignificant. Similarly in Tunis, after a big jump between 1930 and 1932, Japanese goods have continued to lose ground. In French Morocco, however, where the Open Door is maintained under the Act of Algeciras, the story is different. From a position of negligible importance in 1931, Moroccan imports from Japan advanced to tenth place in order of importance in 1932, and sixth in 1933. By January 1934 Japan had taken second place after France. This expansion took place at a time when Moroccan trade with all

<sup>1</sup> See p. 393, below.

<sup>2</sup> See p. 394, below.

the principal European countries—France, Great Britain, Belgium, and Italy—was declining heavily. Nearly half of the total imports from Japan in 1933 consisted of cotton piece-goods (Fr. 30,350,508); artificial-silk piece-goods accounted for a further Fr. 18,635,553. The remainder of the total of Fr. 65,000,000 representing Japanese imports consisted mainly of made-up clothing, rubber shoes, and tea. In addition there were small amounts of canned fish, pottery and glassware, and electric lamps. The Italian silk industry, which was successfully undercutting Lyons by about 20 per cent., was overwhelmed in the Moroccan markets by Japanese goods in 1933. In the course of eighteen months in 1932–4, Lancashire lost about four-fifths of her Moroccan market in bleached cottons. This progress is not surprising in view of the prices at which Japanese goods have appeared on the Moroccan market. The following figures show the prices at which Japanese goods have been quoted c.i.f. Casablanca compared with the works cost of similar items in France:

	<i>Japanese</i>	<i>French</i>
Cotton piece-goods . . .	1 fr. 26 per metre	4 fr. 75 per metre
Artificial-silk pieces . . .	36 fr. per dozen	60 fr. per dozen
Canvas and rubber shoes . .	32 fr. per dozen	..

The invasion of this market was prepared with the usual thoroughness by the Osaka export associations.<sup>1</sup>

In French West Africa the advance of Japanese goods has been rapid, although the total proportion has never become large. An increase in the tariff at the end of 1932 proved ineffective and the position is now regulated by quotas. During 1934 a Japanese ship was visiting all the West Coast ports in the role partly of a travelling exhibition, partly of an itinerant emporium. On this occasion

<sup>1</sup> For a further account of Japanese competition in Africa see Martelli-Chautard, *L'Expansion japonaise en Afrique* (published by Le Comité de l'Afrique Française, 21 rue Cassette, Paris), 1934, and *Les Conséquences du Développement économique du Japon pour l'empire français*, a report of a study-group of the 'Centre d'Études de Politique Étrangère', Paris, 1936.

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motor-cars were offered for Fr. 4,000 (about £55), bicycles for Fr. 72 (£1), typewriters for Fr. 180 (£2 10s.), and bicycle tubes at Fr. 1 ( $3\frac{3}{4}$ d.).

Similar evidence of severe price competition is forthcoming from the Portuguese and Belgian colonies in Africa. Japanese exports to the Belgian Congo increased by 100 per cent. in volume and 30 per cent. in value between 1931 and 1932; imports of Japanese dyed cotton piece-goods increased in the same period from 12,366 to 72,500 kilograms. In Tripoli and Italian Somaliland, however, imports from Japan still accounted for less than 1 per cent. of the total in 1932.

### (vii) OTHER WORLD MARKETS

The foregoing analysis of Japanese competition has been concerned mostly with the larger markets in which Japan has been conspicuously successful. In most cases she has, till recently at least, enjoyed certain advantages. In some cases she was herself a large net importer from the country in question, e.g. of wheat and wool from Australia and raw cotton from India, and so had a claim to sell her goods in return. In other cases there existed a large low-grade demand on the part of a native population under a colonial administration, as in the African colonies, the Netherlands East Indies, Ceylon, and Malaya, so that, whatever the cost to established interests, it was, for political and humanitarian reasons, difficult for the administrations to place heavy restrictions on imports which were admittedly satisfying the needs of the populations under their care. Her invasion of these markets has arisen partly, moreover, from the closing of other and older markets such as resulted from the Chinese boycott and the fall in American consumption of silk. But the process of restriction in old markets which led to the opening of new ones has recently begun to operate in these new markets themselves. Trade with India has since 1934 been limited and regulated on reciprocal terms, and in the Netherlands East Indies the local administration has been endeavouring to negotiate with Japan a settlement

along similar lines,<sup>1</sup> while in the British Crown Colonies a quota system for piece-goods has been applied. It is hard for Japan to challenge the application of the reciprocal principle on which all these restrictions are based, contending, as she does, that much of the expansion of her exports in previous years has been guided by a desire to redress her own unfavourable balance of trade. Again, in the countries towards which Japan's latest efforts at opening markets are directed, e.g. the Balkans, the Near East, and the South American States, Japan is faced with a very different state of affairs from that met with in the undeveloped markets which she has already acquired. In many of these countries there are domestic industries to contend with and most of them are well experienced in commercial negotiation and the practice of tariff-building. Some temporary success was achieved by Japan in Turkey, Persia, Iraq, and Egypt, but the two former dealt a severe blow at Japanese goods by instituting a system of controlled trade on severely reciprocal lines, and Egypt imposed a very high surtax on Japanese goods on the ground that the yen was depreciated.

Japan, however, is by no means badly equipped for negotiating with countries which demand a reciprocal trade. She has to import nearly every raw material and is anxious to do so in the way which will reflect the maximum amount of benefit on her export trade. Already she has, as mentioned above, become a considerable buyer of Egyptian cotton, and has recently received experimental shipments from Turkey. Hopes of acquiring a part of the South African market have not been abandoned, and the purchase of African wool has been increased, even though it costs more than Australian. Similarly, the purchase on a reciprocal basis of oil, tobacco, turpentine, olive oil, and opium from the Balkan and Near Eastern countries is being considered.

This tendency is particularly well illustrated in the Latin American markets. Japan's exports to Central

<sup>1</sup> A deadlock in the conversations occurred, however, towards the end of 1934, and nothing had been settled by the end of 1937.

America have increased from 3 million yen in 1931 to 41 million yen in 1936 and to South America from 10 million yen to 69 million yen in the same period; exports of cotton piece-goods to three of the principal South American markets increased from 22 million yards in 1929 to 44 millions in 1933 and 126 millions in 1936. Some of the results of the Japanese drive in the South American market (principally in Argentine, Chile, and Uruguay) are shown in Tables XV and XVI.<sup>1</sup> It became clear some years ago that continued expansion of Japanese exports to South America would be prevented by State action (in the form of tariffs, exchange control, &c.) unless Japan increased her imports from that area. As a result Japanese imports from South America rose from 13 million yen in 1933 to 112 million yen in 1936. During the same period exports rose from 30 million yen (1933) to 69 million yen (1936), so that a balance of 17 million yen in Japan's favour (1933) was changed to a balance of 43 millions in favour of South America (1936).

For the purpose of giving effect to the policy of developing reciprocal trade with countries to which Japan aims at exporting her factory products, merchant and manufacturers' organizations have been established, among which may be mentioned the 'Near East Trade Promotion Society', and 'Turco-Japanese Traders' Association'. There are similar organizations for dealing with nearly every market where an expansion of reciprocal trade is contemplated.

### 3. CONCLUSION

Although in the space of a single chapter it has only been possible to deal with a few aspects of Japanese competition in markets where it has been most severely felt, certain outstanding characteristics have already emerged and may be mentioned shortly. Japan's hold on neighbouring Eastern markets was established at a relatively early date and as a more or less direct consequence of the War. Her expansion into other markets appears to have

<sup>1</sup> See p. 394, below.



been caused only in part by the expansion of her own productive capacity; the shrinkage of the established markets in the East with the coming of the depression was in itself a powerful incentive to Japan to try farther afield. From this point onwards, it seems that attempts to check Japanese trade expansion in any one area, such as India, have encouraged the diversion of Japanese exports to other and freer markets. This process has been almost continuous, and now that the position in India, the Netherlands Indies, and the British Crown Colonies has been stabilized the pressure has been transferred to the formerly less promising markets, such as South America, which Japan had previously to a large extent ignored. It appears, therefore, that though individual manufacturers in Europe may have benefited by action taken on their behalf in certain controlled areas, European industries as a whole are not likely to have gained much on balance from piecemeal action taken against Japan.

On a more detailed examination of the position, one cannot help being struck by the fact that in the case of some markets in regard to which protests have been loudest, Japanese competition has been quantitatively only small. From this one must conclude that dislocation and discomfort have been caused as much by the threat and manner of Japanese competition as by its actual incidence on current trade. For instance, the very wide margins by which Japanese prices have undercut the established rates of European manufacturers seem not only to have caused intense anxiety among the latter concerning the probable future of Japanese competition if such a state of affairs is allowed to persist, but also to have established quickly among consumers, particularly in primitive markets, a new standard of values with regard to the goods which they have been accustomed to buy. In such circumstances they may prefer to hold back from buying dearer, though better, goods even when there is no glut of the cheaper Japanese product. Thus a degree of dislocation may be caused quite out of proportion to the quantitative significance of Japanese competition at the time.



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Up to the present, in fact, the competition which Japan presents to the manufacturing countries of the West is, as was said in the opening paragraphs of this chapter, due very largely to 'qualitative' causes. To what extent these causes will tend to become inoperative, and in what degree both Japan herself and the other two Eastern countries dealt with in this book are likely to prove capable of expanding their volume of exports to the point of winning for themselves a greatly increased proportion of world trade, are questions the answers to which must be sought in the following chapters.

## II

JAPAN



## CHAPTER I

# BRIEF HISTORY OF JAPANESE INDUSTRIALIZATION

THE social and political conditions in which modern industry took birth were radically different in Japan and in China. While in China trade and industry had always played a normal unimpeded role in the social life of the people, in Japan during the two and a half centuries of centralized military dictatorship preceding the opening of the country, a complex and delicately balanced political structure had arisen which ordered the lives of the four classes, the samurai (or military administrators), farmers, artisans, and merchants. In the days before the revolutions of the eighteen-sixties the economic life of the country was shaped to the needs of the ruling class, the samurai, who, while they nominally despised mercantile pursuits, were dependent upon the merchants for the conversion of their rice incomes into money and also for credit to meet the growing extravagances of the age. Commerce, therefore, had at that time been making exceedingly rapid strides, in spite of the restrictions to which it had been subject, while at the same time the financial and industrial organization necessary for the growing trade of the huge cities of Edo (now Tokyo) and Osaka provided a training-ground which enabled Japan quickly to seize the opportunities of international trade which the opening of the country made possible.

Industrial development had been based not on coal and iron, but on an extremely advanced development of handicraft processes brought over from China and Korea some twelve centuries previously, combined with a slight infiltration of Western technique during the seventeenth, eighteenth, and early nineteenth centuries. A great many objects of common use were, and still are, skilfully fashioned of wood, particularly bamboo, which often made it possible for the farmer to fill the place of the more specialized artisan. Over 80 per cent. of the population

were peasants, and in spite of the rapid growth of manufacture of textiles for a national market from the middle eighteenth century onwards and the growth of luxury demands in the great cities, most of the industries were centred in the villages.

The Japanese steel of those days was famous for its quality, but it was used only for such things as hand-ploughs and spades, swords, armour, and objects of ornament. Copper, in which Japan is especially rich and which was produced (and exported) in large quantities, provided an important industrial material, being used generously in temple buildings and in the ornaments and household utensils of the more wealthy, as well as serving as coinage. Households of all ranks spun and wove textiles, Kyoto was a centre of exquisite handicraft cloth production for the use of the upper classes, while central Japan (particularly round Kiryu) was building up a semi-capitalistic, and partially a factory, industry, which distributed cloth by pack-horse and human transport over the greater part of the country to the cities and even the peasants. The ordinary clothing of the people was of cotton made mainly of home-grown supplies. Nevertheless, in spite of prohibitions, the peasants would wear silk on special occasions such as holidays, weddings, or funerals. The upper classes wore cloths of the most exquisite texture and the samurai used silk even for the appurtenances of their armour. One of the most interesting sidelights which foreign visitors to Japan during the last part of the Tokugawa régime have thrown upon the stage of development of Japanese industry at that period is the account given of the industrial enterprises of the Lord of Satsuma by Laurence Oliphant,<sup>1</sup> who accompanied Lord Elgin's mission in 1857. Besides the working of silver mines, the ruler of Satsuma had established glass factories, cannon foundries (with 800 workmen), and a machine shop and foundry 'with all the appurtenances necessary for the building and repairing of steamers'. Dutch engineers were employed and Oliphant mentions that several young

<sup>1</sup> *Narrative of Lord Elgin's Mission to China and Japan*, p. 63.

Japanese princes (members no doubt of the House of Satsuma) were, already at that period, gaining experience of Western methods by serving in the workshops 'at the lathe, vice or the forge'.

Industry in Japan at the time of the Meiji Restoration was thus in some respects exceedingly backward, in others very advanced; backward in the use of modern science and machinery, but advanced in manual dexterity and ability to produce artistic and useful goods with a minimum of effort. The Japanese standard of life was exceedingly simple but from many points of view compared well with that in other countries of the world of those days.

Japan's foreign trade during the 'closed' period had to be conducted by means of smuggling (the records of which are naturally scarce) and through such very limited transactions as were allowed by the central Government. Chinese and Dutch trading vessels were the only ones which were permitted to call at Japanese ports, and the number of these was at the end of the period in process of being gradually reduced. The importance of the trade chiefly depended on the supply of silk and textiles which they brought largely from other Far Eastern countries and which were exchanged for Japanese copper, precious metals, and foodstuffs.

When Japan opened her doors to Western science and machinery she found herself compelled to build upon an economic foundation consisting of a large rice-growing peasantry and a proportionately small, but rapidly growing, group of highly skilled artisans and merchants, while there existed the beginnings of a superstructure based on coal and iron. The adjustment and balancing of these two structures is still going on, and it is important to remember the importance even to-day of the traditional section of her economic life which continues to provide most of the daily needs of the Japanese people. The social reorganization of the country which followed the revolution allowed the energies and resources not only of the new national Government, but also of the ultra-conservative samurai and nobles, to be diverted into modern industrial channels.

The Restoration itself had been financed by one or two great merchant families whose importance has steadily grown until to-day they, with two or three newer family clicues, control the bulk of modern Japanese Western-style development, subject always to the overriding control of the Government and military. The new period, nevertheless, allowed more freedom in some branches of trade, and small-scale concerns grew up, of which many were developed by samurai families. Alongside this movement there has been a curious survival, and recent revival, of old forms of guild organization. The Government managed to build up a sound currency system, and laid the foundations of railways, shipping, banks, mining, and manufacturing enterprises. Foreign experts were called in and many students were sent abroad for technical training.

The first two decades after the revolution were occupied in this preparatory work, the Government itself being the author of all major enterprises, which included *inter alia* the establishment of cotton-spinning, wool-weaving, cement, and glass factories. The much needed reorganization of the currency was undertaken at an early stage by the founding of the Bank of Japan in 1882 and its investment with the sole right of note-issue; for the financing of foreign trade the Yokohama Specie Bank was brought into being five years later.

Japan's successful war with China in 1894 gave a pronounced stimulus to industrial development by creating a sudden and pressing demand for the wholesale production of a number of essential commodities, while the large cash indemnity imposed upon China further benefited industry by affording the opportunity of establishing the national currency on the basis of gold. The war was followed by the transient trade boom which is normal in such circumstances. This involved a further extension of the range of manufactures, prominent among which were ship-building and the first essays in chemical manufacture, chiefly in the form of fertilizers.

The earlier industries set up by the Government were

now sufficiently established for it to be able to hand over the majority to private management while continuing to give assistance in the form of subsidies.

By the turn of the century a change began to show itself in the composition of Japan's export trade, which till then had consisted mainly of natural commodities, principally raw silk (the preparation of which involves, it need hardly be said, skilful and delicate manipulation), green tea, and traditional types of hand-made articles. It now included a markedly higher proportion of factory products. As a broad indication of the growth of Japanese trade at this stage of development it may be stated that, comparing the decades immediately preceding and immediately following the date of the Sino-Japanese War, imports increased six times measured by value, and four times measured by volume, exports five times and three times respectively, while company capital quadrupled.

The Russo-Japanese War, which occurred ten years after the war with China, had similar and even more marked effects on industrial development. Military requirements, this time on a far greater scale, brought about an important expansion of manufactures both in kind and quantity. The metal industries felt the stimulus particularly, and in the trade-boom years following the war ship-building and the manufacture of machinery and electrical equipment advanced rapidly; rubber and glass goods also entered the field of Japanese manufactures. In the same period Japan developed her characteristic export trade in small articles of Western everyday household use, such as buttons, matches, toys, and low-priced china-ware, the production of which, at highly competitive prices, was made possible by the abundance and dexterity of Japanese manual workers.

This industrial expansion following the war of 1904-5 was assisted by a large inflow of foreign capital. The war had strained Japan's own financial resources to the limit, but its successful conclusion and her enhanced international status opened foreign financial markets to Japanese borrowing. The Government's foreign loans, which prior



to 1905 had aggregated only £13 million, increased by £107 million in the course of the next two years, and a large part of the funds obtained in these and subsequent years was applied to the promotion of industry. In the same two years, that is 1905 and 1906, private companies and municipal bodies raised between £60 million and £70 million from foreign sources. Another powerful aid to industry, resulting indirectly from Japan's increased international prestige, was the abolition of the old conventional tariff and freedom for the Government to impose protective duties.

Of Japanese manufacturing industries, the textile industry is by far the most important, both historically and from the special viewpoint of the present study. Apart from the later introduction of rayon, the spinning and weaving of silk and cotton are the sides of the industry which concern us most, and the general story of Japan's industrialization must be interrupted here in order to trace the developments of these two branches of manufacture.

The silk industry as a whole—that is to say the rearing of silk-worms, the reeling of the thread from the cocoon, and the weaving of silk cloth—has been Japan's major export industry throughout the modern era. At the beginning of the period, in 1868, silk products constituted two-thirds of her total exports. Although silk-reeling is nowadays almost entirely done with the help of machinery, it has retained much of its character as a hand industry. It employs about a third of all the workers in the textile industry, the greater number of whom work in small filatures in rural areas using simple equipment, though it is believed that multi-spindle and automatic reeling machinery may revolutionize the state of affairs in the future. The bulk of Japanese silk is exported 'raw' and silk-weaving for export is of relatively minor importance, largely owing to the building up of a United States silk-weaving industry under tariff protection.

The cotton industry shares with silk the front place in Japan's export trade, accounting nowadays for approximately 20 per cent. of the value of her total exports.

Cotton-spinning by machine power began in Japan before the opening of the country to foreign trade, a spinning-mill equipped with English plant having been set up about 1860 by the head of the Satsuma clan. During the first years of the new régime several more mills were erected or financed by the Government. The growth of mills continued during the 1880's and 1890's, at which early period there was founded the Japanese Cotton Spinners' Association, now one of the most influential manufacturers' organizations in Japan. By 1890 the imports of yarn and its local manufacture stood at the same level; a decade later Japan was manufacturing twenty times as much as she imported. Towards the end of the century Japanese production of yarn had outstripped the home demand, and one-third of the output was being exported from the country—to a value of about 30 million yen.

In the home market the yarn was chiefly absorbed by the hand-loom, which held the field in weaving until well into the new century, and even to-day a substantial proportion of the narrow-width kimono material used in Japan is woven by hand.

In 1932 three-quarters of the cotton-weavers were in establishments with under fifty workers, and more than half of these were in workshops with fewer than five workers, using mainly hand-loom and producing goods for home consumption. Weaving, unlike spinning, is strongly subject to taste and fashion and lent itself less to organization exclusively on mass-production lines. The same applies to wool- and rayon-weaving.

The weaving of cotton piece-goods was, measured by export values, of less importance than the spinning of yarn till the time of the Great War. The opening up of a large market in Korea after its acquisition by Japan and the growing demand for cotton cloth in China greatly assisted, however, the development of the piece-goods industry, and the value of exported piece-goods rose from 9 million yen in 1903 to 46 million yen in 1914, during which period the value of exported yarn had increased from 31 to 73 million yen.

During the forty-six years from the Restoration to the beginning of the Great War Japan had thus taken a step towards industrialization of the Western type. She had also freed herself almost completely from foreign control and management, whether in the shape of an imposed conventional tariff, of foreign instructors, or of the foreign merchants' monopoly in the handling of the import and export trade. Her Government had shown itself determined to create national independence, as far as conditions allowed, in the essential industries and, by fostering new enterprises, to bring Japan into the ranks of the great industrial countries, with a special concentration on textiles. As an exporter of manufactured goods Japan looked mainly to the Asiatic and North American mainlands, the U.S.A. taking the bulk of her silk and China absorbing over 90 per cent. of her cotton products. In the Chinese market for cotton yarn she had taken the place of India, leaving England to the more or less unchallenged enjoyment of the minor trade in yarns of the finer counts.

A new chapter opened in 1914 with the Great War, which created for Japan an enormous market for all kinds of goods and services. By its crippling effect on shipping on the ocean trade routes it gave her an overwhelming advantage in the neighbouring Western Pacific markets, and opened to her fresh markets farther afield. The new markets into which she now penetrated for the first time, or in which she greatly strengthened her previous footing, comprised India, the Netherlands East Indies, South America, many regions of Africa, and, to a lesser extent, European countries. A few comparative figures will illustrate the development which took place during the war period in Japanese industry. For industry in general the following percentages of increase were recorded: number of factory workers 63 per cent., units of industrial power 34 per cent., electric-motor capacity 206 per cent.; in the cotton industry the number of spindles increased by 44 per cent., the output of yarn by 55 per cent.; the steel and iron industry, thrown on its own resources, developed still more rapidly, the output of pig-iron rising

by 143 per cent. and that of the principal steel products by 116 per cent. During the War private iron and steel plants came into existence with aggregate productive power approximately equal to that of the Imperial Steel Works, which had formerly supplied 70 to 80 per cent. of the home production. A most important development occurred in the chemical industry in its applications particularly to dye-stuffs, soda, the manufacture of artificial silk, and the extraction of atmospheric nitrogen.

Foreign trade reflected the effect of the War in an increase in value of exports between 1913 and 1918 from 632 million to 1,962 million yen and of imports from 729 million to 1,668 million yen.<sup>1</sup> Japan's exports to Europe had by the end of the War doubled in value, while those to Asia and North America had more than trebled. On the other hand, her imports from Europe had dwindled to a very small sum, while those from Asia and America had increased more than her exports to those two regions. Australian and South American markets were also becoming important. The major development in Japanese trade was on the export side and resulted in a total excess of exports, taking the war period as a whole, of nearly 1½ milliards of yen. An equal amount was contributed to the credit side of Japan's international account by her 'invisible exports', and though the whole of this vast reserve was used up—largely in the capital improvements of which mention will come later—in the course of the next six years, it served to ease the shock of the severe economic crisis which befell Japan in 1920-1 and which was followed by the earthquake disaster of two years later.

In the opinion of Professor G. C. Allen of Liverpool University the main stimulus which so enormously multiplied Japan's exports during the war period was the financial policy of the Government. The reaction between finance and the export trade is thus described by him in an

<sup>1</sup> These figures must be read keeping in mind the rise in world prices, which probably doubled the gold value of Japan's foreign trade on the basis of pre-war prices.

article in the Supplement to the *Economic Journal* for January 1933:

‘The huge export surplus would have led to a gold drain to Japan. But owing to the embargoes on gold exports during the War, the yen rose high above par. Consequently, the Yokohama Specie Bank could not transmit the proceeds of its export bills to Japan, and, therefore, it found difficulty in maintaining advances to exporters. The Bank of Japan and the Government, however, desirous of facilitating exports, purchased the exchange banks’ balances which had accumulated in New York and so provided funds for additional advances. As a result of these transactions the note-issue rose rapidly, prices increased, and further industrial growth was stimulated. The end of the boom in 1920 found Japan far more industrialized than in 1914, a creditor instead of a debtor country, and with short-term balances abroad amounting to over 1,300 million yen. Her domestic gold reserves had also greatly increased.’

In the cotton manufacturing industry the effect of the war period on output was, as we have seen, considerable; of particular importance was its effect on Japan’s export trade and on the organization of the industry. As regards the former, the volume-increase in foreign shipments, achieved partly at the expense of a restriction of home sales, was calculated at 75 per cent.<sup>1</sup> over the whole range of cotton goods. It is noteworthy that the proportion of woven cloth to yarn among the exports became very much higher than before the War. ‘The enlargement of the production of cotton cloth for export constituted, in fact,’ to quote the report of the U.S. Tariff Commission, ‘the most permanent development that has come to the Japanese industry out of the war.’

This export expansion was mainly in pre-war markets, the sales in the newly won war markets showing a falling off once the abnormal conditions created by the War had ceased. These were the higher-grade markets, and their loss can be explained by the fact that the quality of the Japanese cotton goods, though improved, was still at a

<sup>1</sup> *The Japanese Cotton Industry and Trade*, issued by the United States Tariff Commission in 1921.

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very low level compared with European and American manufactures and that the Japanese industry as a whole remained well behind the West in the matter of technical advance. On this subject the U.S. 1921 report already quoted remarks:

‘The facilities and skill necessary to spin other than coarse yarns, to weave cloths beyond the plain unbleached staples, to carry these and lighter fabrics beyond the crude woven stage by the various finishing processes, or to turn out satisfactory wearing apparel or other finished articles of cotton, have not been developed in Japan to any considerable extent.’

General improvement was nevertheless very marked as soon as the immediate post-war slump had passed. The cotton industry, to quote from a report issued by the British Department of Overseas Trade in 1927,<sup>1</sup> was, apart from silk,

‘the only one of Japan’s industries which has, on the whole, emerged unweakened from the post-war period, a fact which may be ascribed to three causes, namely, the natural suitability of the country for an extension of the industry, the excellent manner in which the industry is organized and managed, and the strong foundations established in the course of the past quarter of a century.’

The sound position of the industry was largely due to measures of reorganization and rationalization made possible by the use of the profits which had been accumulated during the prosperous years of the War, when the net profits of the Japanese mills had increased on an average fourfold. At the height of prosperity the spinning companies were earning half-yearly profits equal almost to 40 per cent. of their paid-up capital.<sup>2</sup> This prosperity was turned to account to strengthen the foundations of the whole cotton industry. Capital values were written down, the company members of the Spinners’ Association alone reducing theirs by 10,805,000 yen,<sup>3</sup> while the aggregate reserves of the companies were increased to five times the pre-war total. With the help of accumulated funds, ‘rationalization’ measures, consisting of amalgamations

<sup>1</sup> *Report on the Cotton Spinning and Weaving Industry in Japan, 1925-6*, by W. B. Cunningham.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

of interests and the co-ordination of industrial processes, were taken in hand. This was made easier by the large size of the Japanese manufacturing units and their concentration in the hands of a small number of capitalists. The degree of concentration can be judged by the fact that in 1925 the number of cotton-spinning companies was sixty-five, of which all but eleven were members of the Association, and that the Association itself controlled more than 90 per cent. of the machinery and of the paid-up capital.<sup>1</sup> At a later date it was estimated that 40 per cent. of the total trade in cotton goods was under the control of four of the great firms<sup>2</sup> and that three firms alone controlled 70–80 per cent. of the import of raw cotton and of the export of cotton piece-goods.<sup>3</sup>

A notable post-war development which affected Japanese industry as a whole was the electrification of factories and workshops. Between 1921 and 1925 the generation of electric power in Japan was doubled, though this was only the beginning of a process which has raised Japan at the present time to the position of the fifth largest producer of electric power in the world, bringing her output approximately to the level of Great Britain, Canada, or Germany.

1919 had been the 'peak' year for Japanese industrial output and for her export trade. After the post-war slump the curve of prosperity, in 1925, rose again to a high point, only slightly below that of 1919. In the following year, however, fresh financial difficulties made their appearance and led to a crisis of the first magnitude which developed in 1927. This crisis—which was largely a legacy of the war boom, due to the large number of financially unsound undertakings which had avoided liquidation till this date—caused the adoption of a belated policy of economy and retrenchment necessitating restric-

<sup>1</sup> Asari, *Development of Japanese Cotton Spinning Industry*, 1931.

<sup>2</sup> Ibid. The firms referred to are: Mitsui, Mitsubishi, Yasuda, and Sumitomo.

<sup>3</sup> Ellinger, *Japan's Competition in the Cotton Trade* (paper read before the Royal Statistical Society in 1930).



tions on factory output. Another result was the tightening of Government control of industrial organizations, which matured in 1931 into the Staple Industries Control Act, designed to eliminate wasteful competition and to promote, support, and supervise industrial cartels. These measures of Government control are dealt with in detail in the following chapter.

By 1927 we find the textile industry thoroughly established as the premier manufacturing industry of Japan contributing 2,676 million yen to a total output value of 6,947 million yen, i.e. practically 40 per cent. of the whole,<sup>1</sup> with the manufacture of food products next on the list, followed by the chemical industry and 'machinery and tools'. The largest item within the textile industry still remained the preparation of raw silk. In the category of 'wholly manufactured' goods—factory products for the most part—cotton woven goods, on the other hand, accounted for nearly one-half. Japan's progress from the primary stage of spinning cotton yarn for export to the secondary and more advanced stage of applying factory methods to weaving, and of exporting the finished instead of the 'half-finished' article, can be illustrated by the fact that yarn, which had represented half of the total value of Japan's cotton exports in 1913, represented only 28 per cent. of their value in 1920 and 8 per cent. in 1932. To-day it retains a proportion similar to that of 1932.

A branch of the cotton industry which has developed greatly on the export side in recent years is the manufacture of cotton and mixed-cotton hosiery. The products of this industry go to many markets, and the case of imports of Japanese hosiery articles into Great Britain may be taken as symptomatic of recent trends in many Japanese exports. Between 1924 and 1933 their sale in the United Kingdom increased fourfold (from 381,000 to 1,620,000 dozens), and the lowness of prices was such that, if we can accept a statement made by the Secretary of the British Hosiery Manufacturers' Federation, it could not be achieved by the British manufacturer 'even if he got his

<sup>1</sup> The present ratio (1937) is about 34 per cent.



material for nothing'.<sup>1</sup> Although, either because of tariffs or failure to meet British taste, this trade did not increase after 1934, in December 1936 an agreement was reached between British and Japanese business men restricting the exports still further.

Supreme as the silk and cotton industries still were in Japanese foreign trade, there were already signs of a challenge to their supremacy by the rayon industry, the manufacture, that is, of yarn and materials of rayon or of mixed-rayon composition. This industry was started in Japan at the beginning of the century, assumed important proportions about 1927, and has since made spectacular advance. In 1930 rayon tissues suddenly appeared as a major item among Japan's exports; by 1932 she had attained her present position as the foremost rayon-exporting country of the world, and as a producer of rayon yarn she now almost equals the United States with a production for 1936 of 275 million lb., which compares with 118 million lb. for Great Britain. She exports at present over 50 per cent. of her output of rayon textiles.<sup>2</sup>

The effect of the Great War in bringing about an abnormal expansion of the heavy industries in Japan, of which mention has already been made, was followed by a strong reaction, and up to the time of the world crisis the Japanese metal industries as a whole, handicapped as they were by local deficiency of necessary raw materials and by the lack of technicians and skilled workers, made very slow advance, and were only kept alive by means of Government assistance.

Since 1931 a combination of circumstances, consisting of the Japanese abandonment of the gold standard, the opening up of Manchuria to Japanese development—especially in regard to railways—and the expansion of naval and military armaments, has radically changed the position, temporarily at least; the heavy industries have revived and have expanded phenomenally; they are now among the most prosperous in the country.

<sup>1</sup> See *The Times*, March 1st, 1935.

<sup>2</sup> For further details of the rayon industry see pp. 84 et seq.

It will be seen from the figures below that since 1930 the production of iron and steel of all kinds has more than doubled. Corresponding figures for manufactures made from steel are not available, but there is good evidence of a similar expansion. Related to world output Japan's production of steel has mounted from 1.8 per cent. in 1928 to 4.1 per cent. in 1936,<sup>1</sup> and Japan now supplies all her requirements.

PRODUCTION OF IRON AND STEEL<sup>2</sup>

(In thousand metric tons)

	<i>Pig-iron</i>			
	<i>Production</i>	<i>Imports from colonies and Manchuria</i>	<i>Steel ingots and castings</i>	<i>Steel bars, shapes, plates, wire, &amp;c.</i>
1926	822	275	1,506	1,256
1930	1,162	289	2,289	1,919
1931	917	337	1,883	1,663
1932	1,011	527	2,398	2,114
1933	1,424	615	3,196	2,863
1934	1,934 <sup>a</sup>	573	3,824	3,275
1935	2,114 <sup>a</sup>	503	4,560 <sup>a</sup>	3,750 <sup>a</sup>

<sup>a</sup> Estimated.

For the raw material of iron and steel manufacture, Japan, as will be shown later, depends largely on foreign imports. Prior to 1932 she imported 91 per cent. of her iron ore, 37 per cent. of her pig-iron, and 20 per cent. of her steel. Hence, the recent expansion in the heavy industries has naturally been accompanied by greatly increased imports of prime products from abroad. In the case of iron ore, the increase has only occurred since the end of 1933. Two-thirds of Japan's consumption of iron ore, which now reaches some 5 million metric tons, has to be imported from foreign sources, mainly China and the Straits Settlements. Meanwhile, Manchurian

<sup>1</sup> *League of Nations Year Book*.<sup>2</sup> Based on figures published by the Mitsubishi Economic Research Bureau and in *Nippon, A Charted Survey of Japan*, 1936.

production has increased and now exceeds one million tons a year, but on account of the large demands from building development and railway construction in Manchukuo itself is said to be not available for export, while Korean production is about half a million tons. Since 1933, Manchuria and Korea have not increased their exports of pig-iron to Japan, though an attempt was made in 1932-3 to avoid dependence on British Indian supplies. Actually, with the steep rise in the demand for steel products in Manchuria, total imports of pig-iron into Japan in 1936 from foreign sources rose from 641,000 tons in 1933 to 944,000 tons in 1936, and this was supplemented by the import of 1,475,000 tons of scrap-iron, mainly from the United States, and also by the purchase of old ships for breaking up. In 1931 only about one-sixth of this quantity of scrap had been needed.

In the supply of semi-manufactured steel products Japan shows signs of increasing self-sufficiency. In spite of greatly expanded home demand, her imports dropped from 435,000 metric tons in 1933 to 316,000 in 1935. The U.S.A., Germany, Belgium, and Great Britain are the chief suppliers. Imports of machinery, though showing an increase, have likewise not kept in step with the growth of demand, indicating that Japan is supplying her own needs to an increasing extent in this department also. The expansion of Japanese manufactures has been reflected in a greatly augmented demand for machine tools, the import of which rose from 5.6 million yen in 1929 to 18.8 millions in 1936. The U.S.A. is still the leading source of Japanese machinery imports, having in 1936 supplied 42 per cent. of the total, while Germany increased her share to 27 per cent. Great Britain provided 18 per cent.

Already Japan is beginning to figure as an exporter of steel goods (e.g. sheets and wire) and of machines. Exports of steel rose from 70,000 metric tons in 1931 to 450,000 in 1935 and are still rising. The greater part (80 per cent.) of these were, however, accounted for by the development work in Manchuria; China took some

10 per cent., leaving only 10 per cent. for other foreign customers. Machinery exports between 1931 and 1936 rose from 14 million to 82 million yen. Textile machinery and locomotives contributed about one-fifth each and electrical machinery about one-eighth. Here again the bulk of the exports went to Manchuria and China, though other buyers included British India and Asiatic Russia.

*Nippon, A Charted Survey of Japan*, 1936,<sup>1</sup> draws the following conclusions concerning these developments in machinery production.

‘With the exception of highly specialised or patented products, all requirements are met by domestic production. . . . Home products, however, are often found wanting due to the inadequate system of production. . . . The machinery and tools in urgent demand by the fast growing industries must therefore be met by imports. . . . In prime-movers the country has been practically self-sustaining since some years ago. In large-sized water turbines required for water-power stations, imports have been all but displaced by domestic products. Home made internal combustion engines are generally recognised for their high workmanship.<sup>2</sup> Diesel engines of high grade quite comparable with those of any country are produced, ranging all the way from heavy machines for shipping to small ones for farm work. For the supply of instruments of precision the country depended almost exclusively on imports for many years. This difficult branch of industrial work, however, has developed, accompanying the recent growth of the munitions industry, to the point of fully meeting the domestic needs.’

While this statement is possibly in rather too optimistic a vein, it is certainly broadly true and we can agree with the book’s later statement that Japanese artisans have a natural aptitude for precise workmanship. In addition to the above-mentioned classes of goods, Japan is a small exporter of telephone apparatus, medical instruments, clocks and watches, and even lathes; so far her production of sewing machines has made little headway.

<sup>1</sup> pp. 245–8.

<sup>2</sup> Most of Japan’s motor-car engines are assembled from imported U.S.A. parts.

There are two big factors operating against a large growth in machinery exports other than to Manchuria and perhaps North China; the first, high cost of raw material, and the second the small scale of production units. The second of these need only be temporary; the effect of the first, though important, can easily be exaggerated, for the cost of raw materials is, in many machines, not a large item. Whether cheaper supplies of the necessary raw materials can be obtained from North China in the future and what influence this might have on Japanese industry are questions which cannot be considered here.

Other Japanese industries in process of development before the world crisis which have since then increased their exports, and have begun to compete with Western manufacturing countries, are those producing woollen and worsted yarns and cloths, hats, paper, rubber tyres, rubber boots and shoes, glass, porcelain, and small electrical apparatus. The wool-manufacturing industry has been in a state of rapid expansion. The output of muslins and serges for Japanese-style woollen clothing has for the past decade been more or less stationary, whereas between 1924 and 1934 the yardage of Western-style cloths produced almost trebled. The export of woollen and worsted tissues rose from 1.4 million yen in 1931 to 46 million yen in 1936. The woollen industry is largely a 'small-shop' industry and the larger factories employ many home workers. An important feature of the wool-manufacturing development is its influence on the Japan-Australia trade. Exports of wool yarn are very much on the increase and the weight of yarn exported in 1934 was five times that of the imports. India, Manchukuo, and China are the chief markets both for yarn and tissues. Meanwhile, imports of yarns and tissues from Great Britain—the main supplier—have been very greatly reduced since 1929.

The growth of the glass industry in the last twenty years has been especially marked. In 1909 Japan was producing only 4 per cent. of her own requirements of sheet glass. She now stands first among producing coun-

tries, with an output amounting to one-seventh of the total world production. As a covering for the numerous windows and sliding doors in Japanese houses glass is rapidly coming into use as a supplement to or substitute for paper.

The Japanese porcelain industry is also one of the most important in the world from the point of view of the quantity of production. The value of its exports has, however, not risen much above the 1929 level.

In electrical apparatus the most striking figures are those relating to the export of electrical bulbs (largely of the smaller variety), the output over a seven-year period up to 1933 being as follows:

1926 . . . . .	63 million bulbs
1929 . . . . .	134 „ „
1933 . . . . .	340 „ „

Exports fell after 1933 owing to restrictive measures against Japan, but recovered in 1936, when 302 million bulbs were exported.

Lastly, some further figures will serve to show the early progress of and recent setbacks to the exports of rubber goods.<sup>1</sup>

(In million yen)

	<i>Rubber and canvas shoes</i>	<i>Tyres</i>	<i>Toys</i>
1930	15	5	2
1931	15	4	2
1932	17	4	5
1933	25	9	9
1934	17	10	6
1935	18	10	4

Reverting now to the history of industrial development generally, the check given to industry by the 1927 crisis proved temporary and lasted only while industries were adjusting themselves to the resultant fall in prices. The next two years saw no abnormal developments. The general industrial situation gradually improved, but

<sup>1</sup> See Mitsubishi Economic Research Bureau, *Japanese Trade and Industry*, p. 398.

output restrictions were maintained in force in most of the important industries and the employment figures showed little if any increase. Towards the end of 1929 the world economic depression began to make itself felt in Japan and Japanese industry was called on to face a fresh series of adversities beginning with the financial crash in the U.S.A.—her principal foreign customer—the sudden fall in silver, which crippled her exports to China, and later the effects of her own return in 1930 to the gold standard of currency.

Industrial recovery after the onset of world depression in 1929 was, until 1934, more rapid in Japan than among any of her trade competitors. At no time did production fall below the 1928 level and a definite turning-point came in the second quarter of 1932. The annual rate of increase in leading industries producing mainly Western-style products can be seen from the following figures:

#### INDEX OF INDUSTRIAL PRODUCTION

*26 articles<sup>1</sup>*

1930	.	.	.	100.0	1934	.	.	.	135.0
1931	.	.	.	102.4	1935	.	.	.	150.4
1932	.	.	.	107.9	1936	.	.	.	161.3
1933	.	.	.	124.1	1937 (six months)	.	.	.	179.7

Japan's export trade reflected more markedly than did her rate of domestic production the influence of world depression between 1929 and 1932, as the following table will show:

#### JAPANESE EXPORTS

	<i>Million yen</i>	<i>Rise or fall over previous year</i>		<i>Million yen</i>	<i>Rise or fall over previous year</i>
1929	2,149	. . per cent.	1934	2,172	+16 per cent.
1930	1,470	—32 „	1935	2,499	+15 „
1931	1,147	—22 „	1936	2,693	+8 „
1932	1,410	+23 „	1937	3,175	+18 „
1933	1,861	+33 „			

<sup>1</sup> Index of Mitsubishi Economic Research Bureau covering textiles (mainly in large factories), chemicals, paper, cement, sugar, beer, flour, minerals, iron and steel, oil and coal.

There was, as will be seen, a remarkable expansion in Japanese exports in the years 1933 and 1934 which, coming as it did at a time when other industrial countries were still in the hollow of the depression, had the effect of making Japanese competition in world markets loom particularly large. The rate of export expansion has since diminished, except in regard to rayon goods, and has not been out of proportion with the general growth of world trade. In the cotton industry particularly, the very substantial rise in the cost of the raw material (the price of the raw cotton almost doubled since 1931) is far from having been fully reflected in the price of the exported finished article, which implies that the Japanese producers for export have in these last few years been receiving a smaller rate of return.

The value of imports has since 1935 increased faster than that of exports largely owing to the increased prices which have had to be paid for cotton, wool, oil, rubber, and other materials. The terms of trade have steadily moved against Japan, as the following indices show:

JAPANESE TERMS OF TRADE  
(*Indices of Yokohama Specie Bank*)

	<i>A</i>	<i>B</i>	<i>Terms of Trade</i>
	<i>Imports</i>	<i>Exports</i>	$= 100 \times B \div A$
1928 average . . . .	100	100	100
1932 . . . . .	65	57	88
1933 . . . . .	83	68	82
1934 . . . . .	93	67	72
1935 . . . . .	96	69	72
1936 . . . . .	104	69	68
1937 (11 months) . .	129	76	59

According to figures of trade volume published by the same bank, Japan in 1936, in order to obtain a volume of imports some 28 per cent. greater than in 1931, had to send out double the volume of that year's exports. While



this has meant that, for the country as a whole, considerably more people have had to work in the export trades or that workers have had substantially to increase their production in order to obtain a less than proportionately increased quantity of goods from abroad, it has not checked a steady rise in industrial and trading profits among the larger Japanese firms.

## CHAPTER II

### PRESENT CONDITIONS

AN exhaustive survey of contemporary industrial conditions in Japan could not be compressed into the available portion of this monograph. It has been necessary to concentrate upon a few major aspects, giving preference to those which reveal the essential characteristics of Japanese industry or distinguish it particularly from its Western competitors.

The first aspect thus selected bears upon national policy and the relationship between State and industry. The 'paternalism' of the Japanese Government and the national character of Japanese economic planning have been, as already indicated, prime factors in the development of industry and seem likely to continue so. In Japan, as the previous chapter has shown, modern industrialization had the State for its godfather, if not its progenitor, and has been developed under the supervision of a few huge family groups, two at least of which date back to the eighteenth century. This is in marked contrast to the experience of Great Britain, the U.S.A., and other Western industrial countries, where modern industry grew up in an atmosphere of strong individualism. It is true that in Western countries too Government intervention and centralization of industrial control have greatly developed in recent times. Nevertheless, the relationship of the State to industry and the influence of the family groups as they exist in Japan are even now something radically different from anything in the West and are such important elements in the industrial structure of the country as to claim a prior place in our analysis of Japanese industry.

This leads us to a survey of distinctive features of the industrial structure itself, paying attention to those which appear to count most heavily in determining Japan's competitive capacity *vis-à-vis* the industries of the West, and including an examination of Japan's finances and of her industrial labour conditions.

Finally, the underlying factors of raw-material resources, the food supply, and the problem of growth of population will be dealt with briefly.

### 1. NATIONAL INDUSTRIAL POLICY

The primacy of the State in relation to economic affairs arose naturally in Japan out of the circumstances attending her transition from a closed economy to a world Power. Only in the U.S.S.R. and, perhaps, in pre-war Germany has deliberate policy exercised such a profound influence upon the course of industrial development; and although the regulative authority of the State has at times tended to weaken with the growth of private capital and powerful vested interests, the Japanese national bias in favour of corporate effort under official leadership remains clearly apparent in the present-day organization of industry and commerce.

The characteristic partnership existing in Japan between the State and private enterprise deserves special attention, since it constitutes one of the main sources equally of her present economic strength and weakness. Its form has varied considerably. In the initial stages of industrialization the Government was obliged, owing to the limitations of the existing commercial and industrial classes and to the general lack of capital and technical experience, to function as *entrepreneur*. Undertakings were established and operated under direct State management until they could safely be transferred to private enterprise. The majority of these passed eventually into the orbit of a few highly centralized family concerns enjoying special Government protection and patronage, but in certain spheres, and notably those of mining and heavy industry, the Government has retained important direct interests up to the present day.

In the steel industry State interests actually predominate, for although, under the stimulus of increased expenditure upon armaments and of Government protection and subsidies, private enterprise has greatly strengthened its position in recent years, about half of Japan's total output of steel and nearly all of the Japanese

and Korean output of pig-iron are produced by the Japan Iron Manufacturing Company, in which the Government holds about 83 per cent. of the capital. This concern was formed in January 1934 and represented the first step towards an amalgamation of all the leading Japanese steel producers (six corporations) in a single merger under Government auspices. It had originally been the Government's objective to achieve this amalgamation at one stroke, but the stronger private firms, fearing that their profits would be unduly curtailed, decided to hold aloof. Thus, when the merger finally took shape as the Japan Iron Manufacturing Company, its adherents, apart, of course, from the Imperial Steel Works, until then under direct State management, were neither very numerous nor very important. Although, through its ownership of the Imperial Steel Works, the new company occupies a position of pre-eminence in the industry, it had until the present war been unable to exercise the monopolistic control aimed at by the Government with a view to stabilizing prices and checking the activities of the profiteer.

The evolution of the Japanese Government's relations with Western-style industry prior to the somewhat revolutionary developments of the past few years has been well described by Professor G. C. Allen.

'Although', he says, 'the State itself established and for a time controlled the majority of the industries and commercial services which now exist, it did not retain the ownership or administration of them once they were firmly rooted.'

After qualifying this statement with the mention of some important exceptions, the writer continues:

'Its [the Government's] main function has been, not to exercise a detailed control over industrial and commercial life, but rather to set up certain economic objectives and to assist private enterprise to attain them. In other words, its aim has been to create the conditions which should lead the *entrepreneur* to direct and organise the economic resources of the country in the way believed to be desirable. Only in this sense can Japan be said to possess a "planned economy".'<sup>1</sup>

<sup>1</sup> 'Economic History', a supplement to the *Economic Journal* of January 1933, p. 629.

An important early step in this evolution from actual State ownership to national economic planning was the Government's exchange of the role of *entrepreneur* for that of industrial financier. Government financing of industry had been simplified by the absence of public indebtedness at the opening of the modern era, which enabled the public credit to be used extensively for industrial purposes in the years succeeding the Sino-Japanese War. As the chief repository of economic power and initiative, the Government was able, moreover, to determine the proportion of national resources to be directed towards the production of capital goods. This was done by means of subsidies, control of the banking system, an appropriate tariff policy, and lastly a taxation system that pressed lightly on the *entrepreneur* and industrial capitalist. Of these several instruments of economic policy, the first two played the more important part during the early period. Thus through the agency of banks established under official auspices, and more especially through the Industrial Bank of Japan, the Government participates actively in industrial financing. Furthermore, the granting of direct subsidies to shipping and industry was, and has not ceased to be, an integral part of official policy, although its relative importance has greatly declined since the Great War with the growth of private investment. In recent budgets it is not possible to discover more than 30 million yen annually which could be classed as industrial subsidies (excluding payments to agriculture).

Having concentrated upon the development of large-scale industry, first by the supply of technical experts and equipment, and later by the means which we have just mentioned, the State now faces a different set of problems arising out of the unexpectedly rapid and comprehensive growth of productive machinery which began during the War and continued in the immediate post-war period. This abnormal acceleration of industrial progress was accompanied, in Japan as elsewhere, by a tendency towards loose management and uneconomic methods of working.

The financial crises in which Japan became involved

as a consequence of ill-regulated 'expansionism' in the post-war period and of the earthquake disaster might indeed have been construed as a warning against the dangers attending too close a connexion between the Government and private enterprises, for the Government's buttressing up of banks and other commercial firms beyond the limits of sound finance certainly intensified the 'crash' when the latter could no longer be averted. In actual fact, however, the disorganization of economic conditions, as a whole, which characterized these years, gave birth to a movement towards rationalization and opened thereby a fresh field to Government intervention.

While the principle of rationalization received the Government's support from the first, the great capitalists, whose power and wealth had vastly increased during the War, were inclined to hold aloof in the hope that prosperity would return of its own accord. Not until the financial panic of 1927, which brought about the collapse of the great Suzuki firm, did they finally recognize the urgent need for some form of adjustment in the shape of agreements to control prices and limit output.<sup>1</sup> Voluntary cartels were then established by many of the principal industries.<sup>2</sup>

But, from 1930 onward, deepening economic depression so greatly intensified competition that these voluntary agreements were found to be an insufficient remedy. At this stage, therefore, some of the business leaders who had previously resisted on principle any considerable measure of State interference sought the aid of the Government with a view to supplementing voluntary control of industry by a form of governmental control which could be legally enforced.

<sup>1</sup> These agreements are dealt with under section 2, below.

<sup>2</sup> Japan often uses modern Western technical terms to describe something fundamentally Japanese (e.g. 'konzern' is applied to the huge family businesses), and the reader is warned against the consequent danger of misinterpretation. A closer study than has yet been made of the relations and similarities between Japanese 'cartels' and her ancient system of trade associations and guilds (*kumiai* and *kabu-nakama*) might throw considerable light on the subject.

There was, moreover, a close connexion between the monetary policy pursued by the Japanese Government in the first post-war decade and the development of rationalization among the industrialists. As long as monetary policy continued to be of an expansionist nature, i.e. until 1926, the industrial leaders had little inducement to promote either rationalization or schemes for price and output control. In 1927, however, Mr. Inouye, the Finance Minister, sought to check the inflationary tendency which had ruled until then, and his action in doing so has been held largely responsible not only for the financial crisis of that year but also for the subsequent development of cartel agreements.

Desiring to encourage this development with all the means at their disposal, the Government established in 1930 a temporary body whose terms of reference were to study and inquire into all important matters relating 'to the rationalization of industry and other measures to promote industry in general'. In particular it was intended thereby to inculcate more widely the principles of standardization and of scientific management, to improve accounting methods and to promote trade. It was in accordance with a proposal emanating from this *ad hoc* investigating body that in June 1930 the Bureau for the Rationalization of Industry came into being. At its head the bureau had the Minister of Commerce and Industry and as its principal members a number of persons selected by the Government from among those 'rich both in experience and learning'. In practice, however, the bureau was recruited almost entirely from among representatives of 'big business' and included no members qualified to represent the interests of labour or those of the consumer, with the inevitable result that its activities have tended to promote a form of rationalization suited primarily to the interests of the capitalists.

The highest authority of the bureau was the Board for Rationalization of Industry. Its work was carried on by a number of standing committees which dealt chiefly with (1) cartels and trade associations, (2) standardization and

simplified practice in the control of sales, and (3) encouragement of the consumption of home products.

In August 1931 the Staple Industries Control Act was passed, the responsibility for its administration being entrusted to the above-mentioned Committee on Control. The general aim of the Acts, as defined by the bureau, was to terminate uneconomic competition by the promotion of cartel agreements which in certain circumstances could be made legally binding upon all members of a given industry. From the following account of the procedure which was actually adopted it will be seen that the Act confers upon the Government, acting through the Committee on Control, wide powers wherewith to regulate commercial enterprise.

When, in any industry designated a 'principal industry' by the Minister of Commerce, a cartel agreement had been concluded by more than half the firms engaged therein, the said cartel was put under the obligation of reporting on the following items: (1) limitation and demarcation of production, (2) allocation of orders, (3) sale price, (4) channel of sale, (5) quantity of goods to be sold.

On the demand of more than two-thirds of the members of such a cartel:

'the State may enforce the whole or part of the agreement upon members or non-members thereof provided that such an enforcement is deemed necessary for the protection of the industries concerned or the sound progress of the national economy.'

The appropriate Minister had also power to order an investigation of the business management of any concern adhering to the agreement and to revise the terms of such an agreement should it be deemed by the Committee on Control contrary to the public interest or injurious to the interests of other industries.

It may be noted in passing that the Act established no criteria by which to determine automatically whether a cartel agreement is contrary to the public interest or not. Full power to adjudicate in such matters rested with the Committee itself. In three or four instances, the Govern-



ment has issued warnings, to industries organized under the Law, against raising prices.

The extent to which the various industries have been brought within the jurisdiction of the Bureau of Industrial Rationalization varies considerably. Twenty-two altogether, including all the major manufacturing industries in the country, have been subjected to the Act, more than half of them at their own request. These include a number of industries—flour-milling, copper-smelting, and brass-founding—which had not previously been organized in cartels, together with others—such as cement—which had been organized and whose organization the bureau has helped to consolidate. In the case, meanwhile, of the two principal industries of Japan, cotton-spinning and silk-reeling, as well as the manufacture of artificial silk, inclusion under the Act was not carried out voluntarily, and, when finally effected by means of a compromise between these industries and the Government, was limited to the operation of that part of the Act which imposed the obligation to report to the bureau. These industries, the cotton industry in particular, have throughout shown less inclination than most of the others to submit to Government control, as became apparent in the course of the cotton negotiations of 1933 between Japan, India, and Great Britain, when opposition to the line followed by the official Japanese negotiators was expressed by the cotton trade.

While the Staple Industries Control Act was certainly the most outstanding measure at that time taken by the Japanese Government in the sphere of industrial policy, reference must also be made to the Export Industries Association Law enacted as long ago as 1925, with the object of forming guilds or associations among small manufacturers producing goods principally for export and among the actual exporters. The function of these associations, which are subsidized by the Government, is to regulate and promote the export trade of their members; in the case of raw silk the Government itself has instituted a system of inspection of goods designed for export in the

hope that by this means causes of complaint as to the quality of Japanese goods may be eliminated. This law, renamed the Industrial Association Law, was extended in 1931 to industries producing for the home market, and later a Central Union of Industrial Associations was formed. In 1932 a Commercial Association law was passed applying to medium-sized and small merchants. In addition, laws were passed controlling organization in the rice and silk industries. The restrictions on selling prices enforced by the associations have not been wholly satisfactory in their effect, having led to withdrawal from membership on the part of many of the newer producers working at lower costs, and an increase of competition from uncontrolled industries in the colonies and in Manchuria and to the charging of monopolistic prices in the home market. The clauses providing for the protection of consumers have hardly been used and considerable confusion has arisen between the activities of the numerous statutory bodies, particularly between the producing and the exporting associations.<sup>1</sup>

The Rationalization Bureau had not, up to the outbreak of hostilities with China, shown itself very effective as a force in industrial progress. It seems to have done little more than provide a channel through which existing forces can operate, and the co-ordination attained has by no means disposed of the existence of conflicting groups and units which hinder concerted action. Industrial organization still remains defective in many branches of manufacture, among which the cement and chemical industries may be mentioned as leading examples.

The above-mentioned legislative enactments and the organs of control established under their terms illustrate the direction taken by State intervention in the affairs of industry up to 1936. From the point of view of their social implications, they may be said to show that the authorities have concentrated attention upon the object

<sup>1</sup> See Mitsubishi Economic Research Bureau, *Japanese Trade and Industry*, pp. 114-35.

of increasing industrial efficiency and only to a minor extent considered means for safeguarding the interests of consumers and operatives. In the administration of these Japanese laws little has been done which can be compared with the attempt to curb monopolistic tendencies and to realize social reforms which characterizes much of the recent industrial legislation of the U.S.A., Great Britain, and other leading industrialized countries of the West.

Criticism of Government legislation, on the ground of too exclusive a support for capitalism and of neglect for the interests of labour and of the general public, needs, however, some qualification in the light of actual practice. The Japanese Government often shows itself extremely sensitive to gusts of public opinion as expressed, for instance, in 'drives' in the Press, and instances can be found where Government measures opposed to the interests of producers have been adopted as the result of popular agitation. As a concrete illustration one may quote the case of the taxi-cab drivers' campaign in 1933, which succeeded in inducing the Government to take measures to keep down the price of petrol.

The historical retrospect contained in the preceding pages shows that the relationship of the Japanese Government to industry tends to grow less clearly definable with the passage of time. Thus, in the early stage of Japan's industrial development we find the State playing an almost paramount role by means of direct Government enterprise and by the promotion and supervision of private manufactures. As the latter developed, the Government began to abandon individual control in favour of the general direction of economic objectives, using for this purpose the resources of the national exchequer, its power of controlling the banks, and the opportunities afforded by the political affiliations of the big families dominating industry and finance. This movement continued, but was to some extent overshadowed by a still more recent development in the shape of legislation designed to control and direct rationalization movements, improve industrial technique, adjust prices, and regulate

production. As the complexity of the economic structure increased, however, the task of the Government became more difficult, and the question arose whether State control could be reconciled with the later capitalistic developments of Japanese society. Conflicting interests multiplied, and State interference or guidance became more and more a delicate and dangerous operation.

Such was the position of the problem at the end of the export boom of 1933-5. The boom had been led up to by exchange depreciation, and the rationalization movement had helped manufacturers to take quick advantage of the favourable situation which this offered. At the same time, there had taken place, with the help of Government bond issues, a huge expansion of the armament industries with a tendency at first towards greater State interference in their working. As the industrial prosperity proceeded and production expanded satisfactorily, the Government could stand back and limit its action to the fostering of cartels and attempts to prevent excessive competition and friction between industrial groups. From 1934 onwards new clouds formed on the industrial horizon. Abroad there were tariff barriers continually on the increase; at home there was growing difficulty in raising enough funds for military and naval expenditure, a continued slump in the price of farm products, and widespread poverty among small industrialists. All this led to a current of unrest and to a popular demand for more economic planning and Government control. The situation came to a head in the troop mutiny of February 1936, when the Minister of Finance, among other members of the Government, was assassinated by 'young officers', a fresh indication of the dissatisfaction with economic conditions which had already previously led to the shooting, in 1932, of Baron Dan, the chief administrator of the Mitsui interests. These movements represented an attack by the 'fascist' elements in Japan upon the capitalist system so closely identified with the great family concerns, and there was evidence that the latter were yielding to the attack and were contemplating at least a partial abandonment of their

monopolistic position, including the offering of their shares for public subscription. By the end of 1936 the stage was set, in fact, for the large-scale experiments in national economic organization which are described later.

## 2. DISTINCTIVE FEATURES OF THE INDUSTRIAL STRUCTURE

### (i) ORGANIZATION

The industrial progress of Japan has been rapid but uneven inasmuch as there has been no simultaneous and parallel development of both heavy and light industries such as has characterized the history of Western industrialization. An explanation of the disparity between Japan's undoubted pre-eminence in certain branches of light manufacture and her backwardness, until very recently, in most of the so-called basic industries, may be found partly in the peculiar aptitudes and limitations of Japanese labour, but mainly in natural deficiencies in ore and fuel, which have rendered heavy industry as a whole unprofitable. In any case the fact remains that, apart from her subsidized ship-building industry and the recent boom in armament production, Japan's manufacturing energies have till within the last few years found their chief outlet in one or two closely interrelated fields. As regards production for export, the Japanese concentrated almost entirely upon the manufacture of textiles and handicraft goods, and although many other commodities are now finding a place within her industrial range it is in this direction that her efforts to compete with the West have achieved the most striking success.

Before proceeding to consider in detail the organization of Japan's all-important textile industry, reference must be made to those features and tendencies of Japanese industrial development as a whole which appear most markedly characteristic. Of these, perhaps the most immediately striking is the high degree of integration achieved in most of the leading industries through the medium of cartel and trust organizations. Japanese in-

dustry, both traditional and modern, is riddled with guilds and trade associations of various kinds. The Japan Cotton Spinners' Association, to take an example, embraces about 97 per cent. of all cotton spindles and about 50 per cent. of all power looms in the country. Other industries possessing strong cartel organizations are iron and steel, spun silk, rayon, paper, cement, chemicals, and chemical fertilizers. Among the manufacturers on a small or medium scale also many regional associations are being established in the hope of eliminating competition. It cannot be asserted that these cartel agreements always function smoothly, nor have they sufficed to avert collisions between rival groups, such as that which occurred towards the end of 1934 between the Japan Cotton Spinners' Association and the Federation of Cotton Textile Industrial Associations, a body representing many of the small independent weaving factories. They are, however, the basis of the strongly unified organization which has contributed so much to Japan's success in the export field, and possess, therefore, for the purpose of the present study great practical importance.

Incidentally, this pronounced development of the cartel system may be regarded as a manifestation of the spirit of group combination which permeates the whole of Japanese national life, having its origin in the earliest religious (Shinto) and ethical (particularly Confucian) traditions of Japanese society.

While the cartel would seem to have proved its utility as a permanent feature of Japanese economic life, there is a strong tendency in certain quarters towards the even closer forms of association represented by industrial mergers and trust agreements. Mention has been made already of the efforts made by the Government to reorganize the steel industry on these lines. Another conspicuous example of unified control is afforded by the paper industry, 95 per cent. of which is now subject to the control of a single giant corporation, partially a subsidiary of Mitsui, the Oji Paper Manufacturing Company, which represents the amalgamation of a number of concerns

formerly belonging to the Japan Paper Manufacturers' Association.

This national bias towards combination could scarcely have produced the high degree of industrial concentration witnessed in Japan to-day had it not been for the centralization of financial control dating from the very beginning of Japan's industrial era which opened some two centuries ago. Financial power has been mainly concentrated in the hands of a few great corporations under the aegis of families such as those of Mitsui, Mitsubishi (Iwasaki), Yasuda, and Sumitomo, to name the four earliest outstanding examples. Partners with the Government in establishing some of the earliest industrial enterprises in Japan, these undertakings have prospered exceedingly with the result that to-day their ramifications extend into almost every department of Japanese economic life. As Professor Wigmore pointed out nearly forty years ago, 'The predominance of the family idea is the key to the methods of Old Japanese commerce',<sup>1</sup> and the latest Japanese account of Japan's foremost business concern, published early last year, begins with the following words:<sup>2</sup>

'The social life of Japan is based not on individuals but on families. Further, each family has a family tree. The social framework of our country is an organic family with a family tree, at the centre of which is the Imperial Household. It may be that the character for "Kokka" (State), which is composed of two characters signifying country and household, came into use fairly late in our history, but it shows the nature of our national constitution. In this way Mitsui is a family with a family tree. . . . A distant ancestor of the Mitsui was Fujiwara Kamatari (a warrior and statesman). . . . A thousand years ago this ancestor was proud of his prosperity; to-day, a thousand years later, in these days of Showa (the present reign) the family rules over its economic kingdom—Japanese capitalism. The tree still flourishes.'

It is this conception of the family in business, and of loyalty to the family by its retainers, as well as the fre-

<sup>1</sup> *Trans. of Asiatic Society of Japan*, vol. xx, Introduction, p. 127.

<sup>2</sup> Wada (Hideo), *Mitsui Konzern Tokuhon* (Tokyo, 1937).



quent jealousies between various conflicting groups, which makes the study of Japanese business organization so difficult for foreigners. The largest of these 'konzerns', as the family organizations are now being called in Japan, is that of Mitsui, which, with its 'main-line', subsidiary, and other companies, is estimated to control 25 per cent. of the paid-up capital, reserves, debentures, and investments of all Japanese companies. Three other organizations, Mitsubishi, Sumitomo, and Yasuda, control another 37 per cent. between them, so that the four combined possibly exercise control over no less a proportion than 62 per cent. of Japanese companies. To these must be added a number of newer but very large groups concerned particularly with chemicals, explosives, and engineering. We must not omit to mention the S.M.R. or South Manchurian Railway Company, financed by the Government and by some of the big family organizations, with its eighty subsidiary companies, whose progress is said to be the 'barometer of Manchuria', and which has in the last few years launched a North China Development Section.<sup>1</sup>

Using the financial institutions under their control as nuclei round which to build up an ever expanding complex of activities, both industrial and commercial, the great capitalists have in recent years gained a notable ascendancy over the smaller industrialists whose more limited resources had been considerably sapped by the general depression existing after 1930. The tendency was referred to in the following passage of a report on the Control of Industry in Japan, submitted to the Institute of Pacific Relations Conference of 1933 by the Tokyo Institute of Political and Economic Research:

"The financial plutocrats, who had hitherto had their interests more or less in various branches of industry, have attempted, and

<sup>1</sup> Control of much of the development on the Asiatic continent not directly connected with railways, which was formerly exercised by the S.M.R., has recently been taken over by a new organization named Nissan, or Japan Production, the shares in which are said to have been subscribed mainly by the general public.



succeeded, in securing a firmer grip on industry since the world economic depression started. . . . Naturally some gained more power than others: what is most noteworthy is the ascendancy of the financial capitalists as compared with the industrial capitalists. In face of the advance of the financial capitalists into the field of industry, by dint of their own capital as well as of other people's capital which they gather through their own banking enterprises, the industrial capitalists, who have few or no such facilities, have gradually had their power of industrial control reduced.'

A complete list of all the enterprises now controlled, for example, by the house of Mitsui makes impressive reading. Through its main and subsidiary companies it is interested in such diverse activities or products as banking, insurance, trust business, transport of all kinds, warehousing, electric power and light, mining, textiles—silk, cotton, wool, rayon, and staple fibre—metals and machinery, chemicals, manufactured food, foreign trade, home trade—wholesale and retail—newspapers, forestry, and plantation ownership. In the textile industry alone Mitsui interests constitute a striking example of vertical trust organization, for not only does the firm own a considerable share in the capital of the Kanegafuchi Cotton Manufacturing Co., the Shanghai Cotton Manufacturing Co., and other mills, but likewise it controls the Toyoda Automatic Loom Co., the largest domestic manufacturers of cotton-spinning machinery, and the Toyo Menkwa Co., one of the three largest cotton-importing and cotton-exporting firms in Japan, as well as various pulp and rayon companies, and shipping and warehousing concerns. Behind all these manifold activities stands the Mitsui Bank, whose capital of 100 million yen gives an inadequate indication of its vast influence.

The great financial power possessed by these leading commercial firms has frequently brought political power in its train. Without their help the defeat of the Shogunate reactionaries in the middle of the last century would hardly have been possible, and 'modern Japan' might never have been born. It has sometimes been suggested that the deflationary policy pursued by the

Minseito administration up to 1931 was inspired by Mitsubishi banking interests and that the subsequent reversal of this policy on the accession to power of the Seiyukai party was connected with the wishes of the Mitsui textile group. Whatever be the truth as to this, we can at least be sure that the two great concerns, through their affiliations with the political parties in question, have at times had a decisive voice in the formulation of Government policy. The antagonism towards the industrialists, which, as already mentioned, has lately become prominent in certain military circles and among the peasantry, sprang from a suspicion that their political power had sometimes been used in an anti-social direction. For this reason it is widely believed that the present ascendancy of the military element in Japanese affairs will lead to the definite curtailment of their influence in the political sphere and conversely to a greater measure of direct control by the State over economic life.

In order to understand clearly the competitive advantages and disadvantages which Japan derives from the nature of her industrial and commercial organization, we may now consider specifically the cotton textile industry. In a paper read before the Royal Statistical Society<sup>1</sup> as long ago as January 21st, 1930, Mr. Barnard Ellinger enumerated certain advantages which Japan was then alleged to enjoy, compared at any rate with Great Britain. They were:

1. Cheaper labour in spinning and weaving.
2. Greater proximity to large consuming markets in the Far East.
3. Better organization of the industry.
4. Cheaper cotton.

To these must be added a fifth advantage which operated after 1931, namely, currency depreciation.

For a detailed appraisal of Japan's advantage with respect to cheap labour the reader may be referred to various comparative estimates of production costs in Japan

<sup>1</sup> *Journal of Royal Statistical Society*, vol. xciii, part ii, 1930.

and Lancashire published elsewhere.<sup>1</sup> Here it will be sufficient to indicate that in so far as Japanese labour costs have since the Great War fallen progressively below those of Great Britain, this fall has been due to the coincidence of at least three distinct factors, namely, the existence in Japan of a less 'expensive' standard of living making possible an initially lower scale of wages, a greater degree of flexibility in the Japanese wage structure, and lastly—until the last two years or so—a rising standard of productivity per worker due to increased efficiency. While in the present and ensuing sections we shall treat each aspect separately, it must be borne in mind that Japan's level of labour costs is a result of the sum total of all these factors and that any magnification of one out of proportion to the rest must lead to false conclusions.

Turning then to the second of the points enumerated by Mr. Ellinger, it will be obvious that Japan's closer geographical proximity to certain important consuming areas makes possible a saving in the cost of freight. At the same time, freight charges comprise such an insignificant part of the final cost of cotton goods—probably at most not more than  $2\frac{1}{2}$  per cent. on the c.i.f. value—that Japan's advantage over European countries in this respect is not a factor of prime importance. She enjoys, however, an inestimable advantage in the fact that her closer associations with China, Manchuria, and in lesser degrees with other Asiatic markets enable her, in comparison with Western trading nations, to keep in more direct touch with, and to obtain a more thorough insight into, the needs of the inhabitants and to adapt herself more easily to local conditions. Proximity to markets also means lower transport expenses. In this connexion we may insert a mention here of another factor in competition, namely Government aids to shipping. These have lately been on a rising scale. Direct shipping subsidies amounted to 6·8 million yen in 1928–9, to 7·4 million yen in 1929–30, to 10 million yen in 1934–5, and to 12·9 million yen

<sup>1</sup> *Manchester Guardian Commercial Supplement*, estimates by Barnard Ellinger, July 1st, 1933, and by Colin Clark, Oct. 2nd and 10th, 1936.

in 1935-6. While a large share of these sums has been used to subsidize passenger services, they have also enabled the leading Japanese shipping companies to offer substantial rebates on certain classes of freight. Taking into account all the factors influencing the cost of overseas transport, there can be little doubt that the balance of advantage in the matter of freight charges rests with the Japanese exporter. In the case of two particular markets, where Japan and Great Britain compete, the N.Y.K. line made in May 1935 the following comparison of freight rates (from *Japanese Trade and Industry*, pp. 112 and 113):

	<i>Cotton goods per freight ton</i>		<i>Rayon goods per freight ton</i>
<i>Japanese vessels</i>			
Japan-Calcutta	15.30 yen	Japan-Argentina	45 yen
<i>British vessels</i>			
England-Calcutta	33.83 yen	England-Argentina	66.47 yen

The third and fourth of the advantages alleged to be enjoyed by the Japanese cotton industry were 'better organization' and 'cheaper cotton'. Our next object will therefore be to show wherein these advantages actually consist and how they have contributed towards increasing Japanese competitive power. We shall do so by outlining briefly certain distinctive features of Japan's industrial and commercial organization, as they are exemplified in the textile industry.

Supreme authority over practically the whole cotton industry was until recently exercised by the Japan Cotton Spinners' Association, which embraces, as has been said, 97 per cent. of all cotton spindles in the country. By requiring its members to furnish at regular monthly intervals detailed particulars as to production, working conditions, consumption of raw cotton, &c., and also through its monopoly of yarn supplies to weavers, the Association possessed data which enabled it to function as a centralized 'brain' co-ordinating all the various activities and processes of the industry. It was this body which was

responsible for research into markets and for determining export quotas and prices. It had, moreover, plenary powers to act on behalf of the industry in foreign trade negotiations, so that its leaders had to be industrial statesmen in the widest sense, with expert knowledge and experience extending far beyond the frontiers of Japan. Since 1934, however, the Federation of Cotton Textile Associations and other outside organizations in the weaving section of the industry have been gaining increasing influence and, to quote from Sir George Sansom's 1936 report,<sup>1</sup>

'circumstances have conspired to put power into these associations and take it away from the spinners' association. The control of exports to certain markets, for instance, rests with *ad hoc* associations and control of production of certain cloths with other associations.'

As a result, the cotton industry has been showing the same overlapping of functions and quarrels between groups as the other leading industries of Japan and 'opinion is gaining ground, therefore, that the cotton industry must set its house in order. . . . The remedy is supposed to lie in the formation of one central organisation with legal powers of control.'<sup>2</sup> In November 1937 such a body was set up under war-time conditions.

Many of the Japanese spinning mills are engaged not only in spinning but in weaving and finishing as well. There is, furthermore, a tendency for the larger units to undertake silk- and wool-weaving and the manufacture of rayon and staple fibre. In Lancashire several hundred companies control the spinning industry, while weaving, finishing, and printing are usually carried on by separate establishments. In Japan twenty large mills own three-quarters of the spindles, while the remainder are owned by fifty-one other firms.<sup>3</sup> An even more significant contrast, however, between the two countries lies in the extent to which the Japanese industry, or at any rate that section

<sup>1</sup> Department of Overseas Trade, *Report on Japan*, June 1936, pp. 32-3.

<sup>2</sup> Ibid.

<sup>3</sup> These and a number of other statistics in the next few pages are taken from Uyeda (Teijiro) and Minoguchi (Tokijiro), *The Cotton Industry*, Japanese Council, Institute of Pacific Relations, 1936.

of it which caters principally for the export market, is dominated by a small group of giant concerns.

Outstanding in this group are the following firms: Toyo, Dai-Nippon, Kanegafuchi, Fuji-Gasu, Nisshi, and Kurashiki. Whether measured by their financial resources or by the number of spindles which they control, these six undertakings own over 50 per cent. of the entire spinning capacity, Toyo alone controlling one-sixth. In addition, they are allied through interlocking finance with the three major cotton importing and exporting establishments as well as with banking, shipping, and warehousing interests.

The cotton-weaving industry is not run on such a large scale. It is true that a quarter of all the looms in Japan were in 1932 (the latest date for which particulars have been procurable) owned by spinning mills, most of which had more than 1,000 looms each, and it is these composite mills, together with some hundreds of factories of the category employing more than fifty workers, which supply most of the cotton cloth exported from Japan. On the other hand, taking workers engaged in the 'under 50' category of weaving mills—which produce largely for home consumption and which give employment to by far the majority of the weaving operatives in Japan—we find that no fewer than two-thirds of these work in very small factories or workshops employing less than five operatives each, and that many, perhaps most, are operating hand-loom. The larger export factories specialize in simpler goods such as shirtings and sheetings, which are particularly suited for automatic looms. The smaller export factories between them produce the other varieties of cloth needed for foreign markets. This combination of large- and small-scale units for export adds, it is claimed, to the competitive power of the industry.

The organizations for the import of raw cotton and for the distribution and sale of finished goods afford perhaps the most striking example of the manner in which the Japanese co-ordinate processes kept elsewhere entirely distinct from each other. The method of purchasing raw

cotton and the choice of types of cotton purchased, the centralization of selling agencies, and the scientific study of markets have each in varying degree been factors in determining the low price at which Japanese cotton goods can be sold. It is necessary, therefore, to supplement the details given as to the manufacturing side of the industry by a brief description of its commercial organization.

If, as it is reported, the common practice of 'hedging', or selling forward to neutralize possible price fluctuations, is seldom, if ever, resorted to by Japanese merchants, it follows that a considerable element of speculation enters into most of their raw-cotton transactions.<sup>1</sup> Stocks of raw cotton are not, as in Great Britain, carried by the merchant but by the spinner, and it is a common occurrence for one of the larger combines to have 30,000, 50,000, or even 80,000 bales unhedged. While such methods expose both the spinner and the merchant to serious losses, profits are correspondingly great, and it is interesting to note that Mr. Pearse considers the post-war prosperity of the Japanese textile industry to be in some measure the fruit of successful speculation during the war period, when the price of raw cotton advanced from 30 to over 100 yen per picul. Of the use made of these profits he says:

'The profits made in this way during the War have enabled them to build up such huge reserves that the average reserves of all the mills belonging to the Japan Cotton Spinners' Association, which represents to-day 97 per cent. of the total spindles of Japan, is over 60 per cent. of the paid-up capital, and that of the large combines substantially over 100 per cent. of their paid-up capital. With these huge war profits, which have amounted, according to the official showing of the Association, to several million pounds sterling for each combine, they have extended their mills in Japan, given bonus shares, they have added to the reserves, and finally they built with

<sup>1</sup> The organization of the Osaka cotton exchange seems never to have been studied by foreigners. Who exactly speculate, we do not know. Nevertheless, it must be remembered that Japanese merchants had a complex hedging organization for rice and other cereals two hundred years ago, before the West had adopted such methods, and some of the technical terms developed then are still in use.



this superabundance of money mills in China which to-day represent more than one-third of the total spindles in China.<sup>1</sup>

The large spinning and weaving mills during the Great War refunded over 60 per cent. of their fixed capital, and, in spite of tremendous capital increases from 1919 onwards, by 1932 60 per cent. had again been refunded. In 1931-2, also, this enabled Japanese traders to buy huge quantities of cotton, or dollars to pay for future purchases, before the depreciation of the yen, and temporarily brought huge profits to the industry. In 1933-4 the rate of refunding capital was doubled.<sup>2</sup>

In existing circumstances, the Japanese raw-cotton market is completely dominated by the four great spinning and weaving combines, which are buyers on such an enormous scale that they can generally dictate their own terms. The business of the Japanese cotton importer would be hazardous in the extreme but for the fact that the merchanting section of the industry resembles the manufacturing section, in that 70-80 per cent. of the raw cotton imported into Japan is handled by a small group of big firms commanding enormous resources, viz. Toyo Menka, Nippon Menka, and Goshō Kaisha. The remainder is handled mainly by ten other firms. The three firms not only handle the bulk of all cotton imports, but also some 40 per cent. of the exports of cotton yarn and piece-goods. Besides this they have interests, which they are said to be continually extending, in the production side of the industry.

The question arises as to how far this co-ordination of buying and distributing agencies has helped to reduce the final cost to the consumer of Japanese cotton goods. While it would be rash, without fuller knowledge of Japanese methods of costing than the authors command, to hazard any final conclusion, it may at least be said that there are two advantages of the Japanese system. First, it ensures that cotton shall be supplied to the mills at cheap rates, for not only is the cost of hedging saved, but the

<sup>1</sup> Pearse, *Report on the Cotton Industry of Japan and China*, 1930, p. 141.

<sup>2</sup> Uyeda and Minoguchi, *Small-Scale Industries of Japan*, pp. 21 and 22.



chief cotton importers, inasmuch as they are also the firms which export the finished product, may hope to regain, by purchasing their cloth from the mills at a relatively low price, anything which they may have lost in the first instance through selling their cotton too cheaply. To quote Mr. Ellinger:<sup>1</sup>

‘Of course these firms cannot always be right in their speculations, but when they are wrong they cut their losses, and may even recoup themselves by profits on piece goods, on their mills shares, or even on their wool and silk business, in which they are largely interested.’

Secondly, the Japanese method of conducting a two-way import and export business not only saves the commission and brokerage payable to intermediaries, but also simplifies exchange operations. The writer just quoted testifies thus to the manner in which the various branches of the Japanese textile industry co-operate towards a common end:

‘The business, in fact, is a chain of which the first link is efficient organisation, in India, America, and other markets, for cotton buying; the second, delivery of cheap cotton to the mills; the third, cheap manufactured goods bought from the mills; the fourth, the selling of such goods in foreign markets with a small rate of profit. The turnover of the whole business runs into such immense figures that it pays on a very small margin.’<sup>2</sup>

On the other hand, purchase and sale in such vast quantities have so far not been accompanied by the rapid introduction of new varieties and qualities of cloth in Japan’s export trade. Also the marvellous talent for design so prevalent among small home-market weaving establishments has not yet appeared in this trade.

Having dealt with the method of purchasing raw cotton current in Japan, we now come to consider the possible benefit to Japanese spinners of being able to use cheaper grades of raw cotton than those generally used in Lancashire. First, however, we must note an important difference which exists between the technical equipments of the British and Japanese industries and which helps to explain the latter’s advantage in this respect.

<sup>1</sup> Ellinger, *Journal of Royal Statistical Society*, vol. xciii, part ii, 1930.

<sup>2</sup> Ibid.

In Japan the textile industry began to expand at a time when spinning technique elsewhere in the world was already far advanced. It was able, therefore, to profit by the perfecting of the ring spindle—a technical development which had come too late to be adopted by Lancashire on the same scale. The result has been that whereas Lancashire with 27 per cent. of all the spindles in the world has 70 per cent. of the mules and only 10 per cent. of the rings, Japan with 7 per cent. of the total has also 10 per cent. of the rings. In the Japanese industry ring spindles have always preponderated and almost all Japanese mills are said to be equipped with them at the present day. The chief advantage of the ring spindle lies in its ability to achieve a higher level of production in spinning the low and medium counts. It has thus been possible for Japanese spinners to make extensive use of low-priced Indian or Chinese cottons and to produce, by blending these with certain American varieties according to jealously guarded formulae, finished articles which compare not unfavourably with certain products of Lancashire mills, while they sell at a lower price. Until 1930 Japan imported from India and China annually about two-thirds of her raw-cotton supply, whereas the proportion of Indian cotton taken by British spinners was seldom more than 12 per cent. of the total imported into this country. Thus during the years immediately before the date just mentioned, Japanese spinners were making use on an extended scale of raw cotton costing on an average 20 per cent. less than that chiefly employed by Lancashire. Since then, however, Lancashire has started to use Indian cotton successfully, while during the slump the price of U.S. cotton fell very heavily; consequently, the advantage to Japan lost some of its importance.

It was calculated some years ago that labour costs represented only between 16 and 26 per cent. of c.i.f. costs for three standard types of Lancashire cotton cloth, and a substantially smaller (perhaps less than half as great)<sup>1</sup> proportion in Japan. The largest part of costs consists of

<sup>1</sup> See *Manchester Guardian Commercial Supplement*, July 1st, 1933, p. 3.

raw-materials costs, and these are approximately the same for any given quality in Japan and England. This being the case, we can conclude that in the past Japan's greater concentration upon low-quality cottons made from cheap raw material has been no small part of the cause of her success in winning British markets.

After 1931 the Japanese industry tended to draw a higher proportion of its raw cotton from the United States. In 1934 imports of American cotton totalled 1,913,035 bales, of Indian cotton 1,902,389 bales. In the two previous years the American share of Japanese cotton imports had been even larger, but mainly as a result of the Japan-India trade agreement, which came into force on January 1st, 1934, and was renewed for a further three years in April 1937, Indian cotton imports have again greatly increased in volume and are now nearly equal to those from America. The fact that India, China, and other Asiatic customers of Japan are increasingly able to manufacture the coarser counts of yarn for themselves may well cause the Japanese spinner to concentrate more and more upon higher qualities in the future—a development which would have the effect of raising proportionately his consumption of American and other long-staple cottons and so indirectly of placing him upon a more equal footing with Lancashire as regards the cost of his material.<sup>1</sup>

Expert investigation has failed to produce any direct evidence that the Japanese textile industry is in receipt of a Government subsidy. Dr. Wissalink of Rotterdam, who made an extensive study of the subject in 1932, came to the conclusion that the Japanese Government, while naturally anxious that cotton exports should be maintained at the highest possible level, was not affording the industry any direct assistance. Exports are, however, subsidized involuntarily by the domestic consumer as a result of the practice of fixing differential prices for yarn

<sup>1</sup> At the present time the movement is rather in the opposite direction, however. The proportion of fine yarns produced was less in 1935 than it had been in 1928; the proportion of medium yarns has very slightly increased.

for home and export consumption. By charging higher prices at home than abroad, many Japanese mills are able to recoup themselves for losses incurred in the export trade. Price discrimination of this kind is facilitated by the fact that the small firms which produce most of the cloth for the home market are almost wholly dependent for their supplies of yarn upon the Japan Cotton Spinners' Association, which can charge them virtually whatever it likes and use the profits thus realized to subsidize export sales.

Resuming the various special features of the exporting sections of the Japanese cotton industry, we find them falling under the following heads:

1. Group control over the industry by the Japan Cotton Spinners' Association and various other trade associations in order to check over-production and uneconomic competition.
2. Large manufacturing units, working two shifts a day and equipped with ring spindles and, to a considerable extent, also with automatic looms.
3. Shipping subsidies and low shipping costs.
4. Concentration of raw-cotton imports in the hands of a few large trading concerns, and the system of bulk purchase, whereby the spinner is often able to obtain his raw cotton at the lowest possible cost.
5. Great efficiency in marketing the finished product resulting from centralization or marketing agencies, from maintenance of closer contact with customers, and from intimate co-operation between the manufacturing and mercantile sections of the industry.<sup>1</sup>

That there is a limit to the expansion of trade which can be brought about by such methods or organization in the trade, recent figures of exports show. Production capacity in cotton and rayon has been steadily increasing, regardless of the fact that markets have shown signs of

<sup>1</sup> These headings are largely based on the Political and Economic Planning report dealing with the British cotton industry. They have been slightly modified in the light of developments since 1934.

contracting, and it is becoming recognized in Japan that to cope with the present situation even the extreme forms of centralization existing there are insufficient. The chief difficulty is with the weaving section of the trade, and it is doubtful whether centralized control and methods of mass production can be intensified in this part of the industry. In his report for 1935<sup>1</sup> Sir George Sansom remarked:

‘Much of the chaos which has been caused in foreign markets in the last year or two by the inrush of Japanese goods at ever decreasing prices can be traced ultimately to this lack of organization in the weaving section. The evils of the system are recognised by the Japanese, but no effective remedy has yet been devised.’

In the preceding pages the cotton textile industry has been chosen to illustrate the outstanding trends in Japanese industrial development and we must now turn our attention to other branches of textiles. The meteoric growth of the cotton industry has only been surpassed by that of the rayon industry, and the former is likely to remain, at any rate for some years to come, the most important single factor in the industrial rivalry of East and West. Lest, however, a misleading impression be conveyed as to its relative importance in the Japanese economy, let us consider the position occupied by raw silk and rayon in Japan's industrial development. Since 1933 the export of the principal textiles from Japan, as shown by the monthly estimates of the Mitsubishi Economic Research Bureau, has been as follows:

EXPORT VALUES  
(In million yen)

	1933	1934	1935	1936	1937
Cotton yarn . . .	15.7	23.5	35.9	38.3	54.9
„ cloth . . .	383.0	492.4	496.1	483.6	573.1
Rayon cloth . . .	77.4	113.5	128.3	149.2	154.9
Woollen yarn . . .	5.3	12.2	9.7	15.3	20.3
„ cloth . . .	12.4	29.8	32.4	46.0	50.1
Raw silk . . .	391.2	286.8	387.0	392.8	407.1
Silk cloth . . .	63.5	77.5	77.4	68.0	72.3

<sup>1</sup> D.O.T., *Report on Japan*, June 1935, p. 58.

In 1934, for the first time, exports of cotton goods surpassed in value those of raw silk and silk manufactures. Although about a third of all Japanese textile workers are employed in the silk-reeling factories and workshops, the industry has declined from the dominant position which it occupied during the ten years prior to 1930, when, stimulated by mounting prosperity in the United States, silk exports from Japan were never less than double the value of her cotton exports. From 1930 a serious curtailment of the American market (the only market of real importance for Japanese raw silk), coinciding with a steady increase in the consumption of rayon, has dealt the industry a heavy blow and has led to Government assistance in the form of purchases of accumulated stocks on a colossal scale. It is remarkable, however, that the quantity, as opposed to the value, of Japanese silk exports has been well maintained, and, both in cocoon-raising and in reeling, costs have been substantially reduced.

The cotton and raw-silk industries afford a remarkable contrast to each other, for, whereas the former commands all the resources of modern industrial technique, the latter requires little power and complicated machinery, and much of the silk-reeling is still carried on under semi-domestic conditions. Cocoon-raising is primarily an agricultural pursuit and represents a secondary, but nevertheless extremely useful, source of income to countless farming communities in all parts of Japan.

When removed from the cocoons, the silk is graded and sold for reeling to the machine filatures. About 3 per cent. of the total output is now reeled by hand. Unlike cotton yarn, raw silk (the product of reeling) has barely as yet become the basis of a major export manufacturing industry, the weaving performed in Japan being to the extent of some 80–90 per cent. absorbed in the home market. In spite of this fact, a measure of reorganization is now being attempted, under the pressure of increased competition from rayon. Small filatures have been amalgamated so as to form more economic units. Some of the great cotton combines are also turning

their attention to the weaving of silk tissues, so that in future an increasing proportion of Japan's silk exports may be expected to take the form of fabrics. Finally, the Department of Agriculture, which in 1924 introduced a rigorous system for the inspection and grading of raw silk for export, is seeking to introduce more scientific methods of production which will improve further the quality of the product and the economic return to the farmers. The Silkworm Egg Control Law of 1934 is one example of the somewhat belated efforts which have been made to rationalize the business of sericulture. The law stipulates that the Minister of Agriculture may supply only the ten best varieties of egg-card to the prefectural governments, which in turn will arrange for the propagation of eggs and for their distribution to the farmers. These latter were formerly liable to have no fewer than six hundred different varieties of egg foisted upon them by irresponsible private dealers, and it is claimed that the proposed standardization will have the effect of reducing the cost of cocoon production (80 per cent. of the total cost of raw silk) by about 10 million yen annually. Since 1931 numerous collective associations have been set up to 'promote the development of, and exercise control over', the industry. They cover the whole industry from cocoon-raising to exporting, and are typical of the recent trend towards planning in Japanese economic life.

In turning from the oldest to consider the youngest branch of the textile industry, it is important to realize that, although rayon manufacture was begun on a large scale in Japan scarcely more than ten years ago, rayon textiles are now Japan's third most important export, being surpassed in this respect only by cotton goods and raw silk. In a short space of time she has come to share with the U.S.A. the world's first place as a producer, her output having risen from approximately 11 million lb. in 1927 to 98 million lb. in 1933, and 275 million lb. in 1936. The capital of the four leading companies in the industry exceeds 125 million yen, having almost trebled since 1931. Efforts made by the Japan Rayon Manufacturers' Associa-



tion to organize production on cartel lines and to reduce the growing tendency to over-production have not proved entirely successful owing to the fact that the newer concerns, many of which, through insufficient capitalization, are a potential source of weakness and instability to the industry, have been reluctant to participate. While, therefore, expanding markets at home and abroad seem to presage continued prosperity, drastic reorganization may in the future become necessary. In this sense the prospect ahead of the industry is not wholly unclouded.

Our immediate concern, however, is with the Japanese rayon industry as a factor in international trade competition, for not only has Japan become in a remarkably short space of time the world's largest exporter of rayon goods but also, as the following figures show, her ratio of export to total production is almost as high as in the cotton cloth industry, reaching 50 per cent. in 1936. In absolute figures rayon yarn and tissue exports during 1936 totalled 131 million lb. for Japan, 22 million lb. for Britain.<sup>1</sup> Corresponding figures for cotton piece-goods were respectively 597 and 399 million lb.<sup>2</sup>

The tendency of Japanese producers to concentrate upon grades of rayon inferior to those normally exported from Britain has probably lessened the impact of Japanese competition in one quarter, while causing it to be the more severely felt in another. To illustrate this point we may quote some observations made by Mr. George Douglas, chairman and managing director of the Bradford Dyers' Association Limited, in the course of his speech at the company's annual general meeting held on February 28th, 1935:<sup>3</sup>

'Japanese rayon goods must be regarded as supplanting Lancashire's fine cotton trade. This foreign export expands year by year, until in less than one decade it has grown from its start of nil to the

<sup>1</sup> Figures based on calculations made by the Joint Committee of Cotton Trade Organizations, Manchester, and by the Japan Rayon Producers' Association.

<sup>2</sup> For a comparison of production costs of rayon yarn in various countries during 1933, see Uyeda and Soda, *Rayon Industry* (Japanese Council, I.P.R., 1936), p. 6, or Mitsubishi, *Japanese Trade and Industry*, p. 279.

<sup>3</sup> As reported in *The Times*, March 1st, 1935.



formidable figure of 345,700,000 square yards in 1934. Nearly half of this volume has come into British Empire markets. No less than 76,250,000 square yards of cheap rayons were shipped by Japan to India in the year 1934, in replacement of the better qualities of cotton goods. It has displaced also a very important volume of Lancashire's piece dyed cotton trade in neutral markets—the Dutch East Indies, for example.'

How far the displacement of cotton by rayon textiles can be carried is a matter for expert opinion, but, if Mr. Douglas gave in 1935 a fair indication of the present trend, we may reasonably anticipate that any further expansion of Japanese rayon exports will have its repercussions, as far as Great Britain is concerned, less upon the actual rayon manufacturers than upon certain sections of the Lancashire cotton trade. It must be remembered that the main competition is from plain or undyed cloth which can be printed in the buying country to suit local taste. Nevertheless, as in the case of cotton piece-goods, the growth of rayon exports has only been continued with great sacrifice of price, and it would appear that its progress is slowing up, the value of the rayon tissues exported from Japan to foreign countries in 1937 having been only 4 per cent. above that for the previous twelve months, in spite of a plan for restricting output by some 30 per cent. among members of the central association.

There is a further development of the rayon industry which, though still in its early stages, opens up vast possibilities for the future. This is the invention and perfection of a synthetic staple fibre produced from cellulose by the viscose process, but having many of the properties of raw cotton, so that either plain or mixed with the latter it can be spun on ordinary cotton-spinning machinery. The potential importance to Japan of a possible substitute for raw cotton based upon materials easily obtainable in the Japanese Empire obviously requires no emphasis, and it is hardly surprising to learn, therefore, that plans have been made for the commercial production of this new material on a rising scale. The output capacity in 1935 was in the region of 50 tons a day.

The present determination of the Japanese Government to maintain the exchange value of the yen by cutting down all non-essential imports has naturally led to the encouragement of the staple fibre industry, which, as compared with the woollen and cotton industries, depends to a lesser extent upon imported raw material. The growing importance of the industry can be judged from the fact that it is expected that, of the 400,000 metric tons of pulp to be used for rayon and staple fibre in 1938, 240,000 tons will be allotted to rayon and 160,000 to staple fibre.<sup>1</sup> By June 1937, daily production had amounted to 200 tons. At the end of September, it was announced by the Government that they would shortly compel the mixing of staple fibre with most woollen yarns and cloths to the extent of 10–20 per cent.<sup>2</sup>

Progress in the woollen manufacturing industry has also been very rapid, but it is as yet too soon to see whether its competition with Yorkshire will be serious in the future. While exports shot ahead after 1932, they were in 1937 only worth £3·6 million. The chief markets are Manchuria, China, and India, where new demands are being catered for. The situation of this industry is discussed further below.

In the foregoing brief survey of Japanese industrial organization it has been found convenient to concentrate upon the textile industry as being not only the spear-head of Japan's export 'offensive' but also a typical example of the form of the Japanese industrial structure. The review, limited though it is in scope, suggests one general reflection on the subject of economic activity in Japan which may fittingly be stated in conclusion of this portion of our study.

Within every major Japanese industry, whether its product enters into competition with the West or not, a process of controlled development is at work, which has gone forward at lightning speed during the past few years. In the first instance, it has been carried forward by the leading members of the industry itself; behind these, however, stand the great financial capitalists, few in number

<sup>1</sup> *Trans-Pacific*, Tokyo, July 29th, 1937.    <sup>2</sup> *Ibid.*, Oct. 7th, 1937.

but all-embracing in the scope of their interests. Next there are the military leaders determined to build up a self-sufficient economy (embracing Japan, Manchuria, and North China) regardless of the economic cost. Lastly, presiding over the whole industrial hierarchy is the Government, which, as the highest embodiment of paternalist tradition, takes a comprehensive view of the entire industrial field and directs industry towards certain clearly defined national objectives. All classes of the community, from Cabinet ministers down to the humblest artisan, will be found to share the conviction that these objectives are not primarily concerned with financial profit but with national prestige; each new market conquered, each additional shipload of cotton drill or rayon leaving a Japanese port, even each triumph over a technical difficulty, is held to exalt the nation and to bring Japan nearer to the 'place in the sun' which other nations would, as many of her people conceive, deny to her.

## (ii) FINANCE

The advantage derived by Japan from her currency depreciation has occupied so much space in discussions of her competition with Western industry that the present section on finance may suitably commence with a review of the currency situation and an attempt to appraise the extent of the advantage which depreciation bestowed on industry, its degree of permanency, and the extent to which it has been counteracted by increased costs of production in Japanese factories. The events leading up to Japan's departure from the gold standard will first be summarized.

Japan abandoned the gold standard at the end of 1931, after which the exchange value of the yen steadily fell until it settled down in 1933-4 to a rate of about 1s. 2d. (the par rate of exchange before September 20th, 1931, having been approximately 2s.). It may be taken as axiomatic that the depreciation of a manufacturing country's currency, in relation to the currencies of its commercial rivals in world markets, confers upon the export trade of the country concerned an immediate bonus to the detriment

of its competitors, and that subsequently the benefit to industry of higher receipts, in the local currency, for manufactured exports, tends to be offset, first by the higher cost, in the same currency, of the raw materials imported for manufacture, and secondly by any increase in manufacturing costs resulting from the inflation of internal prices and the consequent raising of wage levels which may result from the increased productive activity. Thirdly, there are the effects of a change in the conditions of demand for her exports following upon a saturation of her overseas markets due to the cheapening of her exported goods, or to the raising of protective tariffs and other trade barriers designed to restrict their entry. Let us see how far these processes have operated in the case of Japan.

At the close of 1931 Japan was faced with a twofold crisis owing to the fact that the outbreak of hostilities in Manchuria had coincided with a period of deepening world depression which caused a severe shrinkage in her export trade. Fears as to her financial position, intensified after Great Britain's departure from the gold standard in September 1931, led to such a marked flight of capital that the Government was forced to take action in order to prevent a dangerous depletion of the national gold reserves. The decision to reimpose the gold embargo was, therefore, largely dictated by circumstances beyond the power of any administration to control.

Three factors had made Japan's ultimate departure from the gold standard practically inevitable. They were:

1. Heavy 'bear raids' on the Japanese currency by foreign speculators, undertaken in the belief that Japan would not be able to deflate sufficiently to bring her prices into line with those of gold-standard countries and so establish an equilibrium in the balance of payments at gold parity.
2. The continuous pressure brought to bear upon the Government by important Japanese commercial concerns which had speculated heavily in U.S. dollars and therefore stood to profit considerably by a fall in the exchange value of the yen.

3. The enhanced competitive power of British exporters resulting from sterling depreciation. Of these three factors, only the last-mentioned has any direct connexion with the growth of manufacturing activities.

Space does not admit of an account of the events leading up to the gold embargo, and it must suffice to record that its reintroduction, after a suspension of less than two years, took place on December 13th, 1931, following upon the accession to power of the Seiyukai Party. Within three months the exchange value of the yen, abandoned to the play of natural forces, depreciated to some 34 per cent. below gold parity. Despite measures designed to control speculation, the yen depreciated most rapidly between November 1931 and August 1932 (the sharpest fall actually taking place during the month of August 1932, when, owing to fears of inflation, the yen declined from 61·7 to 45·6 per cent. of its former gold parity).

Between August 1932 and March 1934 no further violent fluctuations were recorded, but depreciation continued steadily until, in the latter month, the yen was being quoted at around 37 per cent. of its former par value. Its gold value had thus fallen farther than that of any country with the exception of Mexico and certain South American States. Subsequently its value in terms of sterling, to which it has been pegged, has remained fairly constant.

From 1933 the Government has made a determined effort to prevent the yen falling farther in terms of sterling, and has instituted a system of exchange control which recently has had to be tightened until, with the outbreak of the present war, control has extended to the actual prohibition of certain 'non-essential' imports. All sections of society seem by now to have realized that further depreciation would serve no useful purpose.

Enough has been said of the circumstances in which Japan reintroduced the gold embargo in 1931 to show that any charge that she devalued for purely commercial ends would be difficult to sustain.

Nevertheless, the decided advantage which accrued to

Japanese commerce in the earlier period following the departure from gold is beyond question. How far any of this advantage remains at the present time must be judged in the light of the facts now to be given concerning the extent of the counteracting effects of enhanced raw-material costs and of higher domestic prices reflecting themselves in increased manufacturing costs.

The opportunities which currency devaluation offered to Japanese manufacturers were not unnaturally seized. To quote from a pamphlet issued by the Federation of British Industries in May 1933:

‘The depreciation of the yen during the past year has been deliberately used to embark on a reckless national sales policy with disastrous results to British and other traders in various markets of the world.’

Japanese manufacturers had, in fact, accumulated stocks of raw material while the yen was yet on a gold basis and consequently were in a position to exploit the opportunity which presented itself with Japan's departure from the gold standard. While, therefore, the statement quoted above may be accepted as substantially correct, relating as it does to the year 1932, the authors of the pamphlet are on more debatable ground when in a subsequent passage they refer to ‘the device of continuing exchange depreciation’ as ‘one of the deadliest weapons in a period of trade depression’. So long, of course, as internal costs have not fully responded to the lowering of the yen, currency depreciation may be said to assist the process of external trade expansion. Moreover, the increased yen cost of world-market raw material does not directly affect Japan's international competitive power, in so far as the manufacturer of, say, cotton textiles will receive back as part of the export price paid for his goods a sum in his own currency equivalent to that which he originally paid for his raw cotton. In the long run, however, the rise in production costs may be such as to neutralize almost all the benefit arising from depreciation, unless, as has been the experience of Great Britain, certain exceptional factors intervene. Before, therefore, we can determine to what

extent currency depreciation continues, and may still further continue, to be of importance in Japanese trade expansion, we must consider whether similar exceptional factors are present in Japan's case, and, if so, what is the extent of their operation.

With the single exception of silk-reeling, the major exporting industries of Japan depend in varying degree upon imported raw materials. We should be enlarging the scope of our study unduly if we sought to estimate the effects of currency devaluation upon manufacturing costs over the whole range of these industries. For purposes of illustration it will be more convenient to confine our attention to the cotton textile group, which depends almost wholly upon foreign countries for its supply of raw materials, since not more than 1 per cent. of Japanese raw-cotton requirements are at present being covered by domestic or colonial production.

According to Japanese authorities 'generally the cost of raw cotton is estimated to range from 60-85 per cent. of the selling price', though it naturally varies from firm to firm, from product to product, and also from month to month.<sup>1</sup> By something between the two quoted percentages, therefore, the export bonus resulting from currency devaluation will have been offset by the rise in manufacturing costs consequent upon an increase in the price of imported raw cotton; and the higher the world price of cotton, the greater will this offsetting tend to be.

In Japan's case, however, as has already been mentioned, many merchants had accumulated stocks of raw material, or foreign currency claims with which to buy it, in excess of their immediate requirements. Not until these stocks or claims had been exhausted was the effect of currency depreciation wholly reflected in increased raw-material costs. The length of the period during which the advantage of these activities to Japanese traders remained cannot of course be determined at all exactly.

While currency depreciation automatically increases the cost of imported raw materials, its effect upon wages

<sup>1</sup> Uyeda and Minoguchi, *Small-Scale Industries of Japan*, p. 12.



and other manufacturing costs is neither so immediate nor so easy to assess. We must, therefore, examine with some care the second factor tending to neutralize Japan's competitive advantage from the depreciation of her currency, namely, the rise in domestic prices which might be expected to reflect itself in increased production costs for manufacture both in regard to overhead expenses and in regard to wages, bearing always in mind that internal price-levels are the direct resultants of monetary policy and the amount of production of the goods and services concerned.

The first fact to elucidate is the reaction of Japanese domestic prices, wholesale and retail, to the fall in the foreign value of the yen.

While the course of the yen exchange from December 1931 to 1934 was progressively downwards, apart from minor fluctuations, this depreciation has never been fully reflected in the wholesale and retail price indices. As in Great Britain, so also in Japan, the internal purchasing power of the currency has not as yet fallen as low as its external value. Nor, in view of the structure of Japanese life, is there any need that it should do so. A large part of the goods consumed by Japanese workers—Japanese rice and barley, fish, *saké*, eggs, matting, sandals, charcoal—but with the notable exceptions of cotton and silk cloth, enter but slightly into international trade. In all of these Japan is practically self-supporting. By December 1936 the wholesale prices of a number of these commodities, particularly rice, barley, and matting, had, it is true, risen by as much as 60–80 per cent. above the 1931 level, rice in particular being affected by the Government's valorization schemes. On the other hand, *saké*, soy, and charcoal had only risen by from 10 to 40 per cent. Cotton textiles had more than doubled in price owing to the rise in international prices. The retail price index, which includes a number of international trade goods, was in December 1936 about 20 per cent. above the 1931 level and by December 1937 had risen a further 14 per cent., most of the increase having taken place during this year. While internal prices thus rose substantially, in fact faster than wages, the rise was



still far from being in proportion to the depreciation of the yen. Further, its causes were largely unrelated to exchange depreciation, being the result of increased activity stimulated by the Government bond issues: so that the advantages of the depreciation of the yen in lowering the international value of those manufacturing costs which were dependent mainly upon the state of internal production and monetary circulation still largely remained. The relatively small increase in workers' living costs coupled with the superabundance of female labour available from the farming villages had prevented the rise of wage-rates in the textile and other industries. During the first half of 1937, however, the retail price index was 25 per cent. above the 1931 level. Since then, under war-time conditions, it has gradually risen until in February 1938 it was about 40 per cent. higher than in 1931.

In order to estimate more accurately the effect of currency depreciation upon costs of living and real wages of industrial workers, we may refer to the memorandum presented by Professor Teijiro Uyeda and Mr. Tosuke Inokuchi to the Institute of Pacific Relations in 1936.<sup>1</sup> Basing their calculations upon an estimate made by the Cabinet Statistical Bureau for 1926-7, the writers give the following figures of average expenditure and of its percentage distribution in the case of households within the 60-80 yen income group living in Tokyo (this group probably contains the majority of city households).

	<i>Cost (yen)</i>	<i>Per cent.</i>
Food . . . . .	28.88	42.14
Clothing . . . . .	8.21	11.98
Housing . . . . .	11.26	16.43
Fuel and light . . . . .	3.63	5.29
Toilet and medical expenses . . . . .	4.44	6.48
Presents . . . . .	3.43	5.00
Culture and recreation . . . . .	2.20	3.21
Other expenses . . . . .	6.49	9.47
Total . . . . .	68.54	100.00

<sup>1</sup> *Cost of Living and Real Wages in Japan, 1914-1936* (Japanese Council, I.P.R., 1936).

Of these various items, food, housing, fuel, presents, and sundries (which include taxes, education, and tram fares) become dearer only to a minor extent as a consequence of devaluation, though the cost of clothing may be expected to reflect to some extent the increased cost of imported raw cotton and wool.

It is in the light of these data that the authors examine movements in the cost-of-living index and of wage-levels for Japan's industrial workers. They find that between October 1931 and March 1936,

'actual monthly earnings have been more or less stationary over the whole period, although since January 1934, the index has not gone below the base line (Oct. 1931). On the other hand, the cost of living has been steadily rising from the beginning, though not very rapidly. Accordingly, the real wage index has shown a continuous downward tendency and is now (1936) some 10 per cent. below the base level. Industrial workers, on the whole, have received about the same sums of money in wages, but as the goods and services they require for daily life have become more expensive, they have not only been unable to improve their standards but, on the contrary, have been obliged to economize in household consumption.'

This state of affairs seems to be confirmed by the following table based on figures published by the Bank of Japan:

	<i>Daily earnings<sup>a</sup></i> <i>1926 = 100</i>	<i>Rates of wages<sup>b</sup></i> <i>Jan. 1926 = 100</i>	<i>Retail price index</i> <i>1931 = 100</i>
1931 . . .	90.7	91.3	100
1932 . . .	88.1	88.1	101
1933 . . .	89.2	85.1	107
1934 . . .	91.2	82.9	110
1935 . . .	91.1	81.3	112
1936 . . .	91.8	80.7	117
1937 (Jan.) . .	92.7	81.5	125
„ (July) . .	96.3	83.0	127
„ (Nov.) . .	99.4	83.0	132

<sup>a</sup> Daily earnings are calculated by dividing the total payments made to the workers during the period by the total number of working days of all the workers employed.

<sup>b</sup> Wage-rates are an average of the reports sent in by factories of the rates they pay.

It will be observed that currency depreciation did not to all appearances produce a marked effect upon any of the three indices. The retail price index (which includes a number of imported articles) did not advance substantially until 1936. The limited extent to which Japanese workers depend upon imported commodities for the maintenance of their standard of life explains the stability until recently of living costs and so of wage-levels. Even when full account is taken of the part which 'indirect' wages occupy in the total of wage costs, it is clear that currency devaluation has not increased wage costs to the manufacturer to any material extent. A comparison of the first and second columns of the table on page 95 appears to reveal a position in which, as compared with 1931, the manufacturer is actually paying less in direct wages for each unit of output, as is shown by the fall in wage-rates, while the worker himself has been compelled to work either longer hours or at a higher pressure in order that his daily earnings may approximate to those which he was receiving six years ago. One explanation of the fall, until last year, is that, with the increasing employment in industry (the index of which rose from 81 in 1931 to 128 in July 1937), a greater proportion of less skilled, and therefore of lower-paid, workers has been recruited. This and other factors tending to depress wage-rates are discussed in a subsequent section.

After accounting for costs of raw material and wages there remain other items, which, according to estimates of the Mitsubishi Economic Research Bureau, accounted, between 1929 and 1933, for about 30 per cent. of the total manufacturing costs in Japanese factory industry. These items include interest on capital, depreciation, maintenance, insurance, taxation, and power. The effect of currency devaluation upon overhead expenses of this nature are probably confined—in the earlier stages at least—to the two items of cost of power and depreciation of machinery, as for power costs the extensive use of hydro-electric power in Japanese factories minimizes the use of imported fuel (imports of coal amount

to some 12 per cent. of consumption and of these more than three-fifths is derived from Manchuria). In machinery costs, Japan's imported machinery, of course, costs her more when her currency is depreciated, and her considerable dependence upon imported iron ore may be increasing the cost of machinery produced in Japan and so involve a heavier replacement and extension bill. In any case, the enhanced cost of replacement of plant can be hardly a major factor in the manufacturer's budget, and we may come to the general conclusion that the effect of currency depreciation upon manufacturing costs will be limited, in the main, to the higher price which has to be paid for imported raw materials and new machinery.

Having dealt at some length with the immediate effects upon Japanese industry and Japan's foreign trade of currency depreciation and the fluctuating value of the yen at home and abroad, we must now examine more generally Japan's financial structure as a whole, upon the strength or weakness of which her industrial future must to a great extent depend. In order to limit this examination within practical bounds, we may select as criteria of Japan's financial status two primary features of national finance, namely, the budgetary position and the national debt.

To appreciate properly the present budgetary situation we must look back over a period of years. The first post-war decade witnessed in Japan an extraordinary growth of public expenditure. Over a period during which the budget of almost every other country showed signs of contraction that of Japan came near to doubling itself, increasing from 1,172 million yen in 1919-20 to 1,815 million yen in 1928-9. Meanwhile, internal prices had declined but little from the high levels attained during the war boom. Currency fluctuations were disorganizing foreign trade, and the imminence of debt-conversion operations in London and New York set a premium on financial orthodoxy. A number of considerations dictated therefore a return to the gold standard and there was general approval when Mr. Inouye took this step in 1929.

The next two years witnessed a reversal of previous financial policy and public expenditure was considerably reduced. The moment chosen for the deflationary process was, however, inauspicious, for in 1930 the depression intervened, followed a year later by the outbreak of hostilities with China. Faced with grave economic difficulties the nation attributed them, not without some modicum of reason, to Mr. Inouye's policy, which, it became evident, had proved itself untenable. In the following year, in circumstances described earlier in this section, the gold embargo was reimposed, and soon afterwards Mr. Inouye expiated with his life the imputed errors of his political course. After 1931 the costs of the Manchurian campaign, and, for a time, of subventions for the emergency relief of agriculture, imposed an increasing burden on the national finances. As a result, the budget total, which from 1,815 million yen in 1928-9 had dropped to 1,476 million yen in 1931-2, rose steeply again to 2,254 million yen in 1933-4, the small surplus of 1931 being converted in the two succeeding years into a huge deficit. The next two budgets were each only slightly lower at about 2,200 million yen and those of 1936-7 and 1937-8 increased to 2,311 and 3,409 million yen respectively. With the outbreak of fighting in China the latter had to be supplemented, and expenditure is now estimated to exceed 5,400 million yen. Of this 3,300 million yen has to be raised by public subscription, more than three times the annual amount raised in this way during the past three years. A comparatively small proportion of this had actually been spent by the end of December 1937.

This rapid review of Japan's finances from the end of the Great War needs to be completed by some explanation of the causes of the growth of public expenditure before the world depression. A useful analysis is given by Professor Andréades in his book *Les Finances de l'Empire Japonais et leur évolution*, in which he enumerates four principal factors. These are, firstly, the persistence in peace-time of a mood of extravagance, encouraged by the prosperity after the War which led to the setting up of

high standards of perfection for the various departments of government and of public life; next, the high rate of expenditure upon the army and navy, amounting immediately after the War to very nearly 50 per cent. of the total annual budgets and involving a considerably higher sum than during the War itself; and finally two further causes, one accidental and the other closely related to it. The former of these was the Great Earthquake of 1923, which destroyed Yokohama and large sections of Tokyo. This caused damage estimated at 5,506 million yen and at the same time paralysed much of the economic life of the country, while the second cause, arising partly out of the earthquake, was the financial crisis of 1927, due to ill-considered measures of financial assistance granted by the Bank of Japan and other public credit institutions to businesses which had been especially 'hard hit'. Drafts payable in devastated areas were rediscounted to the extent of something like two milliards of yen, and when, after the Suzuki failure, it became generally known that the great majority of these drafts were still outstanding, a financial panic ensued in which the Government were compelled to intervene and guarantee repayment by the semi-State banks of some 700 million yen. Though a general bank collapse was thus averted, it was at serious cost to the national exchequer.

In spite of the fact that during this pre-crisis period public expenditure had so greatly increased, the Government were able, owing to the growth of national wealth since 1914,<sup>1</sup> to find sufficient current revenue to balance the 'ordinary' budget, while the 'extraordinary' expenditure—mostly of a capital nature of definite economic value—was defrayed mainly from internal loans without undue inflation of the national debt.<sup>2</sup>

<sup>1</sup> Between 1912 and 1924 the national wealth is estimated to have increased from 37 thousand million to 102 thousand million yen. From 1924 to 1930 it rose, according to these estimates, by a further 8 thousand millions to 110. *Japan Year Book*, 1937.

<sup>2</sup> See also an article by the late Professor Fukuda in the *Journal des Économistes*, 1926, Series 6, vol. 84.

Account must be taken, however, of the drain upon the taxable resources of the Japanese people which resulted from the heavy increase in local, as distinguished from governmental, taxation. Figures for the year 1926 given by Professor Andréades indicate a total of departmental and municipal taxes almost equal to the total of State taxes, and show *per capita* increases during the previous decade of 351 per cent. in the case of departmental taxation and 322 per cent. in the case of municipal taxation, compared with 231 per cent. in the case of State taxation.

In the circumstances just described Japan's budgetary position up to the beginning of the crisis displayed no obvious signs of strain, whatever it may have developed in the shape of hidden weaknesses. Since 1930, however, the position has become much more serious. Primarily, of course, this was due to the universal economic depression, but after 1932 it was mainly attributable to the Manchurian affair and the complications arising therefrom, and since 1937 to the Sino-Japanese conflict.

At an early stage of the depression the regular budgetary surplus had disappeared. Meanwhile 'extraordinary' expenditure, which had slightly exceeded 350 million yen in the two years 1930-2, jumped to 767 million yen for 1932-3 and to 941 million yen in 1933-4, leaving a deficit which could only be covered by borrowing.

Included under the heading of 'extraordinary expenditure' was a large part of the expenses of the Manchurian campaign and the very considerable sums voted for the emergency relief of agriculture in the form mainly of price stabilization for silk and rice as well as rural credits. The price-stabilizing scheme in respect of rice at first proved unexpectedly expensive owing to abnormally heavy rice crops, and in 1934 is stated to have involved the Treasury in a loss amounting to 70 million yen. Since then the price has risen greatly, and the cost to the Government has lessened. Military and naval expenditure, in particular, has become an increasing burden on the exchequer. The position in this respect can be shown as follows:

## PRESENT CONDITIONS

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(In million yen)

	1936-7	1935-6	1934-5	1933-4	1932-3	1931-2
1. Total expenditure	2,311	2,206	2,163	2,254	1,950	1,477
2. Total army „	508	497	459	462	374	227
3. Total navy „	552	536	483	410	313	227
4. Total fighting services „	1,060	1,033	942	872	687	454
(4) as percentage of (1) . . .	46%	47%	43%	39%	35%	31%

The growing expenditure on the fighting services finds its reflection in the annual budget deficits, as will be seen from the following table:

(In million yen)

	1936-7	1935-6	1934-5	1933-4	1932-3	1931-2
Total expenditures .	2,311	2,206	2,163	2,254	1,950	1,477
Ordinary revenues .	1,450	1,405	1,342	1,391	1,287	1,315
Deficit to be covered	861	801	821	863	663	162

Even before the present war, military and naval expenditure seemed likely to continue to unbalance the budget, for Japan's insistence upon an increased naval ratio involved her in a programme of growing naval construction; the army vied with the navy in its demands for appropriations.

How long can this expenditure continue, and how far can funds be obtained from taxation? In this connexion the following table based on calculations made by Professor Hijikata<sup>1</sup> is relevant:

(In million yen)

	1931-2	1932-3	1933-4	1934-5	1935-6	1936-7
National tax revenue . . .	735.5	695.8	748.5	843.1	899.8	923.3
Cost of national bond service . . .	213.8	241.4	334.7	361.2	371.8	383.1
Ratio . . .	29%	35%	45%	43%	41%	42%

<sup>1</sup> S. Hijikata, *Nihon Keizai Seisaku* (Japanese Economic Policy), Tokyo, 1937, p. 439.



This shows that the national tax revenue has, since 1933, increased faster than the cost of the national bond service. Further, in view of the high level of certain industrial profits it is probable that a considerably larger revenue could, without adverse effects on industrial investment, be obtained through income taxation than is the case at present. In April 1937 new taxes estimated to provide some 40 million yen in revenue were passed by the Diet and existing taxes were raised to provide a further 200 millions, the main increase being in the income tax. Since then, further extensive tax-raising proposals were brought forward in February 1938.

A point to be observed in weighing the chances of a financial break-down in Japan is that, unlike most of the belligerents in the Great War, she has so far financed her war expenditure by means of internal borrowing and increased taxation without recourse to the inflated issue of paper money. It is clear, nevertheless, that large budgetary deficits, only to be covered by means of heavy borrowing, must in any case persist for some time, and the rapidly growing dead-weight of debt is a darkening shadow on Japan's internal finances. Its removal will be one of the first problems to be faced by the Japanese Treasury when peace returns, and it is open to doubt whether the task can be accomplished without subjecting the country to a period of severe economic depression. In the meantime, so long as industrial prosperity continues and rural incomes do not fall, and presuming that the savings of the Japanese people remain readily available to finance fresh Government expenditure, the borrowing process, even at its present increased tempo, may continue for a considerable time without precipitating a financial crash, but should any event occur to destroy the confidence of Japanese investors, Japan would have difficulty in avoiding a collapse of her financial structure. The present excessive Government borrowing is creating a dilemma which can be solved only by recourse to one of three expedients—drastic retrenchment, uncontrolled inflation, or a completely centralized control of the economic

system. The Government seems likely to be impelled along the last of these courses.

To turn now to the second feature of Japanese State finance selected for treatment in this section, namely the national debt, we may begin by glancing rapidly at the progress of the national debt since the end of the Great War. Between 1919 and 1933 the debt was multiplied two and a half times. Until 1931 it underwent an average yearly increase of 276 million yen, but since that year the internal debt has more than doubled, as is shown by the following table based upon official figures published in the *Japan Financial and Economic Annual* for 1936, and later budget statistics.

## DIRECT GOVERNMENT DEBT

(In million yen)

(External debt figures calculated at old par, i.e. yen = \$0.4985 = £0.1076)

	1937	1936	1935	1934	1933	1932	1931
External debt .	1,308	1,332	1,403	1,415	1,390	1,473	1,479
Internal debt .	10,585	8,522	7,688	6,724	5,664	4,715	4,477
Total debt .	11,893	9,854	9,091	8,139	7,054	6,188	5,956
Increase or decrease over previous year .	+2,039	+763	+952	+1,085	+866	+232	-4

These figures show that the Japanese Government has been able to finance its vast expenditure of recent years entirely out of internal resources. The heavy investments in Manchuria of the past few years have been supplied by Japanese and, to some extent, Chinese investors, and the export of capital from Japan to Manchuria has for the greater part taken the form of goods and services which have not placed a direct strain on the exchange rate. No new foreign obligations have been incurred since 1931 and the total of foreign indebtedness outstanding at the end of 1937, namely 1,308 million yen, was actually less than in 1929. This position of independence of

foreign financial centres is now obviously liable to change inasmuch as the cost of developing the immense new territories which have lately come under Japanese control can hardly fail to exceed the resources of her own capital market. In fact, it is being publicly stated by leading Japanese business men that the development of these territories will largely depend upon ability to attract thither a plentiful supply of foreign capital. How far the latter will be forthcoming in any sufficient quantity is, of course, a matter open to question.

Japan has so far experienced little difficulty in transferring abroad her foreign debt service. Not only is her external debt itself a comparatively light one, but repatriation has been taking place on a considerable scale. According to an estimate quoted in *Nippon, A Charted Survey*, over two-thirds of all Japanese Government bonds issued abroad are now held by Japanese citizens domiciled in Japan. Japan's balance of international payments was until 1936, on the whole, a satisfactory one, as will be seen from the table given in Appendix II.<sup>1</sup> If invisible items, such as receipts from shipping and foreign investments, be taken into consideration, Japan may actually have been a creditor on international account. There was thus up to that date no evidence from the figures that Japan was likely to be faced with any serious difficulty in continuing to meet her foreign obligations, nor that she had to fear a threat to her financial stability through pressure from foreign creditors.

In 1937 the position changed somewhat, as in her anxiety to continue the expansion of her heavy industries and export trade Japan found herself purchasing increased quantities of raw materials, most of which had risen more in price than had her exports. She was, therefore, only able to meet her obligations by exporting several hundred million yen of gold. Although her gold production is increasing it will be impossible for Japan to maintain exports of specie at the recent level, in which case she is bound to curtail her imports to bring their value

<sup>1</sup> See p. 407, below.

into line with that of her exports of goods and services.

When we turn to consider Japan's internal indebtedness the situation is, as already intimated, far less reassuring. The practice of borrowing to make good successive annual deficits has resulted since 1931 in a 100 per cent. increase in the internal debt. There seems little, if any, prospect of improvement in this respect, and the essential question is how far the Government can rely on the domestic capital market to continue to cover its annual requirements. Conditions in Japan suggest that, unless a crisis supervenes, resources should be available to supplement the deficiency of revenue in the immediate future. In spite of signs of real stringency after the outbreak of war, the pressure of military expenditure has not at the time of writing unduly inflated retail prices. The policy of cheap money, initiated under the Inukai Ministry in 1931, is still operative, and interest rates have continued to fall. Moreover, the recent rise in industrial profits referred to in Chapter I should provide fresh funds for investment. There is, therefore, no positive evidence that a point of saturation has yet been reached. This state of affairs cannot, however, be regarded as healthy, and, notwithstanding the Government's resistance to inflationary tendencies, once full employment of the country's labour force is approached, inflation can hardly fail to ensue. This would be difficult to control and might be the prelude to the widespread financial collapse which the more pessimistic prophets have envisaged as the result of the heavy political commitments entered upon by the Japanese Government during the last few years. In this connexion a heavy weight of responsibility rests with the administrators of the Capital Adjustment Law described later.

### (iii) LABOUR

Until recently it was the opinion of many competent observers that the cheapness of Japanese labour would prove illusory if wage costs for each unit of production, instead of direct money rates, were made the basis of

comparison with other countries. In a contribution to the *Political Science Quarterly* made in 1929 and entitled 'An Analysis of Japan's Cheap Labour',<sup>1</sup> Mrs. D. J. Orchard estimated that nearly three times as much labour was being used in Japanese cotton mills as was required for the same output in America. Thus, although the American worker received a daily wage four times the average Japanese wage for the same length of day, average American wage costs per pound of yarn were only 39 per cent. greater than the Japanese. She continued:

'The mills are overmanned; the labour is cheap but inefficient to a degree that greatly offsets its cheapness; extra labour costs reduce the margin of advantage still further; and there are some American mills, in spite of an average wage four times as high, that are producing at a lower wage cost per pound of output.'

In Lancashire, also, the higher average productivity of the British operative for many years went far towards neutralizing the competitive advantage in world markets which Japan enjoyed as a result of her generally lower scale of wages. We have therefore to consider at this stage how far the development of Japanese export trade in cotton goods in recent years has been assisted by progressive reduction in labour costs brought about by increased productivity on the part of the individual worker.

For reasons which we may briefly note, the average efficiency of Japanese industrial workers is inclined to be lower than that of workers in the West. In the textile industries over 80 per cent. of the entire labour force has always consisted of young women and girls whose physical capacity is apt to be impaired in the smaller mills by long hours and under-nourishment. Conditions have greatly improved in the last decade or so, but it is open to question whether even now the diet provided for factory workers in Japan suffices to sustain bodily and mental powers to the same extent as among Western industrial workers. Perhaps a partial set-off to this disadvantage is provided by the traditional manual skill in delicate work of all

<sup>1</sup> *Political Science Quarterly*, vol. xlv, 1929.

grades of Japanese workers, and the way in which they cheerfully accept long hours and simple living conditions.

In many Japanese industries and more especially in cotton-spinning and -weaving the turnover of labour is uneconomically high. This may be partly explained by the fact that, having been recruited in the vast majority of cases directly from the peasantry and not, as in the West, from a separate wage-earning class, the workers are bound to the soil by strong family and social ties<sup>1</sup> and tend to regard their period of factory labour mainly as a means of securing temporary financial assistance for their families, or, in the case of women workers, of providing a marriage-dowry.

Evidence of this high labour turnover is supplied by the following figures (derived from a Japanese source),<sup>2</sup> which give a percentage grouping of workers according to duration of employment:

<i>Employed</i>	<i>All industries</i>			<i>Textile industries</i>		
	<i>Male</i>	<i>Female</i>	<i>Average</i>	<i>Male</i>	<i>Female</i>	<i>Average</i>
Under 5 years .	41.0	71.6	57.5	56.2	71.9	69.1
5 years or over, but less than 10 years	25.8	21.3	23.4	24.8	21.3	22.0
10 years or over, but less than 15 years	14.8	4.4	9.1	10.0	4.2	5.3
15 years or over, but less than 20 years	7.9	1.3	4.3	4.6	1.1	1.8
20 years or over, but less than 40 years	9.5	0.8	4.8	3.8	0.7	1.3
Over 40 years .	0.2	0.0	0.1	0.1	0.0	0.0
Unknown period .	0.8	0.6	0.8	0.5	0.8	0.5

<sup>1</sup> Recent statistics of migration to urban districts point to the diminishing importance of this factor. Among the women members of farmers' families it is still, however, customary to go to work in a factory for a period before marriage.

<sup>2</sup> Census of Labour, 1927, quoted by Mr. Isoshi Asahi in *The Secret of Japan's Trade Expansion* (Tokyo, July 1934), p. 66. Some figures for 1930 are given in Uyeda and Minoguchi, *Small-Scale Industries of Japan*. These show a marked difference between metal and engineering trades (mostly male workers), where 60–80 per cent. of the workers have been employed over 10 years, and cotton-spinning and -weaving (mainly female workers), the figures for which are similar to the above.

In the 'under 5 years' group we find a percentage distribution as follows:

<i>Employed</i>	<i>All industries</i>			<i>Textile industries</i>		
	<i>Male</i>	<i>Female</i>	<i>Average</i>	<i>Male</i>	<i>Female</i>	<i>Average</i>
Under 1 year .	10.9	18.5	15.0	16.1	18.0	17.8
1 year or over, but less than 2 years .	8.7	17.7	13.6	12.9	18.0	17.0
2 years or over, but less than 3 years .	7.6	14.8	11.5	10.9	15.2	14.4
3 years or over, but less than 4 years .	7.9	11.9	10.0	9.3	11.9	11.4
4 years or over, but less than 5 years .	5.9	8.7	7.4	7.0	8.8	8.5

From these figures two noteworthy facts emerge: first the remarkably high proportion of workers whose term of employment does not exceed three years' duration—namely 40.1 per cent. for industry as a whole and 49.2 per cent. for textiles alone—and, secondly, the relative impermanence of female workers as compared with males, clearly shown by the far higher proportion of males included among those employed for ten years and over. Seeing that it takes probably from three to six months for an operative to acquire a normal degree of proficiency<sup>1</sup> (even when machinery is of a semi-automatic type), it is clearly arguable that Japan's high labour turnover has militated against the development of a large class of permanent skilled workers and hence of a high efficiency standard. Conditions in this respect are, however, liable to be changed either by a recurrence of the agrarian crisis, which would force increasing numbers on to the labour market without the possibility of reabsorption into rural districts, or conversely by such an improvement in working conditions as would tempt workers to remain permanently. Either contingency would almost certainly lead in time to the growth of a separate industrial proletariat, constituting a reserve of more or less skilled labour.

<sup>1</sup> Uyeda and Minoguchi state that in cotton mills girls can become 'qualified operatives after two or three months' training and become skilled workers after a year's practice' (op. cit., p. 30).



It is largely due to reasons connected with labour that the striking efficiency of certain Japanese industries has in many cases been of such recent date. In cotton-weaving the cheapness of labour formerly retarded the adoption of technical improvements such as the automatic loom, since it was long believed that an equivalent advantage could be gained more economically by employing more workers to speed up existing plant and to extend hours of work. This policy was modified, however, as it became clear that in practice it tended to defeat its own end, for not only were both the quality and quantity of output *per capita* inclined to deteriorate with the lengthening of working hours but also the necessity to maintain and house a growing body of workers involved increasingly heavy indirect wage costs. If, therefore, the history of Japan's industrial development be viewed in perspective, the great disparity between the cost of capital equipment and that of labour is revealed as the factor which has deferred the attainment of higher efficiency. It was not until profits, accumulated during the War, had enabled Japanese concerns to re-equip themselves with improved machinery that Japan's vast reservoir of cheap labour could be converted from a potential into a real asset and Japanese competition in world markets become a factor to be reckoned with. The process of rationalization begun shortly after the War was hastened by the compulsion to reduce costs resulting from the official deflationary policy pursued between 1927 and 1930 and by the law of 1929 which limited night work for women and children, thereby necessitating more efficient methods of production to compensate for loss in working hours.<sup>1</sup>

<sup>1</sup> 'Night work: under section 4 of the Factory Act the employment of young persons under sixteen years of age and of women is prohibited from 10 p.m. to 5 a.m. The employment of such persons until 11 p.m. is, however, permitted with the sanction of the administrative authorities and almost all cotton-spinners have sought permission to use this exception.' International Labour Office, *Industrial Labour in Japan*, 1933, p. 185. Hours in cotton-spinning were in 1935 recorded as 8.2 per day. In other industries for which records are published they ranged from 9½ to 10.



Any study of Japanese labour conditions must take into account the heavy additional charges supplementary to wages imposed upon the Japanese manufacturer by obligations towards his work-people which it is customary for him to assume in a spirit of paternalism, and which include the payment of semi-annual, maternity, and discharge bonuses in addition to the performance of welfare services of various kinds. Since it is the widely variable nature of these extra labour costs which renders an accurate estimate of real wages in Japan so extremely difficult, some mention of their origin, and estimate of their probable present magnitude, seems to be called for.

Owing to the reluctance of the Japanese population to abandon inherited modes of life, the earlier stages of Japan's industrial development were associated with great difficulties in the recruitment of factory labour. Workers had often to be brought long distances from their homes, and when, as was usually the case, suitable accommodation near the factory was not available, the employer had no choice but to take upon himself a major responsibility for their welfare, adapting to modern industrial conditions those principles of paternalism which under the 'family system' had governed the relationship of master-craftsman and apprentice. The system dates from far back and was fairly common even in the middle eighteenth century. Out of the peculiar circumstances attending the industrial transition in Japan there arose an elaborate system of grants and services undertaken by the employers without legal obligation, but acquiring with the passage of time an almost contractual sanction. To this day workers are to a great extent housed, fed, medically attended when sick, and even educated, at the expense of their employer. It is true that a small sum is deducted from wages as a contribution towards the cost of meals supplied by the factory, but the various other services included under the heading 'welfare' would seem in almost every case to constitute a charge entirely borne by the factory owner.

In 1933 75 per cent. of the girls working in spinning mills and 45 per cent. of those in weaving mills (employing

more than five workers) were housed in factory dormitories, and there can be little question that the dormitory system, with its various adjuncts, alone represents an important extra labour cost to many manufacturers.

An official inquiry into the 'extra' labour costs of 2,267 factories employing 100 or more workers for the period 1931-2 showed that 28.4 million yen was spent by employers on this account. Of this, 9.8 million yen went for retirement and discharge allowances, 9.8 million for food allowances, and 3.9 million on theatres, cinemas, excursions, &c. The total cost is estimated by Sir George Sansom as involving an addition to wages of about  $6\frac{3}{4}$  per cent. He adds: 'It would appear that, although many employers undoubtedly spend large sums on welfare work, &c., the additional charge upon industry as a whole which these payments impose is not so great as is sometimes supposed.' As more than half the industrial workers of Japan are employed in workshops with fewer than five workers, it is probable that these costs bear an even smaller proportion to published wage-rates than those given in the sample.

Another extra cost arising from the organization of Japanese labour, particularly girl labour, is the employment of recruiting agents, of which in the cotton textile industry alone there were in 1933 some 3,300, each earning perhaps 100 yen a month or more.

'These agents usually live in the country districts whence many girls come and keep in close touch with various institutions such as primary schools, girls' organisations, village authorities and labour exchanges, as well as the families of individual girls. And after the girls have gone to the mills by their inducement they act as the intermediaries between those girls working away from home and their families. They do not get any fixed salary from the mills but receive a commission for each girl they put to work, ranging from 4 yen to 6 yen per girl. They also receive about 30 sen per month for keeping a girl in touch with her people at home.'<sup>1</sup>

Before leaving this subject of 'extra' costs, it is only fair to point out that the importance of the welfare work

<sup>1</sup> Uyeda and Minoguchi, *op. cit.*, pp. 33-4.

undertaken by Japanese industrialists as a factor in the cost of labour is held by some observers to have been frequently misrepresented. It is argued that the continuance of welfare work on a large scale is chiefly necessitated by the slow development in Japan of those social services which in advanced Western communities are ordinarily undertaken by the State or by the municipality. In the words of Miss Utley, 'the British manufacturer's rates and his health and unemployment contributions are certainly a heavier financial burden than all the welfare work of the Japanese mill-owner'.<sup>1</sup> Whether we accept this opinion or not, there is no denying that, on the average, the rates paid by the Japanese manufacturer are very much lower than those levied upon his British counterpart, while the system of unemployment insurance in force in Great Britain has no parallel in Japan.<sup>2</sup>

In the first edition of this book considerable space was devoted at this point to an attempt to establish a comparison between labour costs in the textile industries in Japan and the Western countries. Further reflection, and the consideration of criticisms of reviewers provoked by this attempt, have intensified the doubts already expressed in the earlier edition as to the possibility of building valid conclusions on the very imperfect data which are available, and it has been judged best to eliminate the section in question and to substitute merely a few facts bearing generally on the question of relative labour costs.

From the latest reliable statistics upon which a comparison can be based of weekly wage-rates in Japan and in Great Britain, we have taken the following figures which give the rates paid to the workers in two classes of the industry chosen as representing the extremes, high and low, of industrial wages.

<sup>1</sup> Utley, *Lancashire and the Far East*, 1931.

<sup>2</sup> State health insurance has existed, however, since 1927, and in 1930 embraced 81 per cent. of the total factory and mining population. Apart from certain professions classified as dangerous, employers' contributions are equivalent to 2 per cent. on wages, a further 2 per cent. being contributed by the worker. See *Industrial Labour in Japan*, pp. 274-9.

	<i>Great Britain</i>	<i>Japan</i> (yen converted at 1s. 2d.)
Cotton textile workers (female)	31s. 9d.	4s. 10d.
Machinery and metal-workers (male) . . . . .	42s.—62s.	22s.—35s.

These figures show, at the one extreme, unskilled female cotton operatives working at one-sixth of the British rate, and, at the other extreme, skilled men metal-workers earning one-half. As regards the former class, it must be noted that the female workers in Japan are mainly young girls under 20, and that if their wage-rates are compared with those of young learners in the British cotton trade the discrepancy between the two rates is not very marked.

The question of workers' efficiency must be taken into consideration in any study of relative labour costs. In regard to this it becomes necessary to modify the conclusions reached in the earlier edition, namely, that the efficiency of the Japanese factory workers was rising steadily. The improvement which was making itself seen between 1929 and 1934 would appear, on the results of later investigations, to have come to a halt. After the latter year the indices of efficiency in the Japanese cotton textile industry ceased to advance.<sup>1</sup> Statistics<sup>2</sup> show that between 1931 and 1933 the value in yen of the output per working hour in leading factory industries rose only from 1.11 to 1.46 as compared with a rise of from 100 to 144 in the (Mitsubishi) wholesale price index. With the fall in money wage-rates there was indeed a rise in ratio between output value and wages, but this rise was small over the industries as a whole, being 18 per cent. between 1929 and 1933, or 30 per cent. between 1931 and 1933, though in the latter case nearly 60 per cent. taking the textile industry by itself.

If we may accept the presumption afforded by the statistics (which, it must again be emphasized, have to be

<sup>1</sup> See Uyeda and Minoguchi, *op. cit.*

<sup>2</sup> Mitsubishi Economic Research Bureau, *Japanese Trade and Industry*, p. 101.

applied with considerable caution), namely, that the efficiency level of the Japanese factory worker has become more or less stationary, the explanation of this phenomenon may reasonably be sought in the fact that the rapid expansion of manufactures has necessitated the recruitment of increasing numbers of unskilled workers. In this case, there is ground to suppose that the trend towards higher individual efficiency will reassert itself in the long run.

Leaving the question of wages and labour costs, we may conclude with a reference to one or two general features of the Japanese labour situation.

In the matter of hours the larger establishments now conform more or less to Western standards; small undertakings, on the other hand, usually work 10 or 11 hours a day and sometimes even more. In the course of his tour in 1933 M. Maurette<sup>1</sup> was able to verify that the workers in most of the factories visited by him enjoyed more favourable conditions than those provided for in Article 9 of the Washington Hours Convention<sup>2</sup> despite the fact that the convention has never yet been formally ratified by Japan. It must be borne in mind, however, that M. Maurette, as he himself admits, had little opportunity to investigate any but the larger enterprises representative of Japanese industry in its most modernized forms. The conditions described by him cannot be regarded as typical of the country as a whole, since according to the 1930 census 53 per cent. of Japan's industrial population still gains its livelihood in a multitude of small undertakings employing fewer than five workmen apiece, and 59 per cent. in those employing fewer than ten. These proportions are apparently not declining. In the words of the Japanese director of the Tokyo branch of the I.L.O. as recently reported, 'In the smaller factories,

<sup>1</sup> Maurette, F., *Social Aspects of Industrial Development in Japan* (I.L.O., 1934).

<sup>2</sup> Article 9 of the Convention prescribes for Japan a maximum working week of 57 hours for workers over 15 years of age and the observance of a weekly rest period of 24 consecutive hours.

hour restrictions do not apply. Employer and employee work together as they see fit.<sup>1</sup>

On this and other accounts we must seek to define the part played in Japan's economic life by the small manufacturer. Commenting on the dualism in Japan's economic structure which results from the coexistence of large-scale modern industry with handicraft and trade conducted along traditional lines, the author of a series of articles published in 1934 by the *Spectator* writes as follows:<sup>2</sup>

'The old structure of agriculture, primitive handicraft and petty trade, in which far the greatest part of the population still lives its economic life to-day, could not but lag more and more behind the hastily erected superstructure of modern industry, transport trade and banking. There has never been time to unify the two Japans, which live side by side all over the country. They are, indeed, drifting more and more apart.'

While factory industry may be regarded as somewhat of an extraneous development in Japan in so far as it has not hitherto been attended by profound social and economic changes comparable to those which resulted from Great Britain's Industrial Revolution, it is wrong to infer, as does the author of the above passage, that the two systems do not overlap at any point. Despite the apparent cleavage between them, signs of interaction are clear. Competition from factory products is, for example, causing the decay of a number of traditional handicrafts and home industries, such as the manufacture of *tabi* (Japanese socks), *shoyu* (soya-bean sauce), and household utensils. In other directions, however, a reverse process has been set in motion by the fact that the small producer is ceasing to move in the old groove and, often with the help of electric power, is turning his attention to the production of goods which bring him into competition not only with industries in his own country but even with those of the West. Primarily, the small Japanese manufacturer has always catered for the domestic market, and the evolution

<sup>1</sup> *Trans-Pacific*, Nov. 18th, 1937.

<sup>2</sup> 'Japan and the World' (in the *Spectator*, Oct. 26th, 1934).

which his business is now undergoing in many directions has consequently been forced upon him by a change in the character of local demand, occasioned by the increasing diffusion of Western tastes and ideas throughout the country.

The output of workshops formerly engaged only in the manufacture of highly specialized goods for domestic consumption such as lanterns, umbrellas, sandals, and so forth, now includes electric bulbs, bicycle parts, fountain pens, rubber boots and shoes, together with many other articles which are beginning to find favour with the Japanese masses. The boon to the farmer of cheap rubber boots when working on the flooded rice fields, or of rain-proof coats to children on their way to school in a typical Japanese downpour, can well be imagined. Such articles are not, however, destined only for home consumption. Unlike the purely Japanese goods which they tend to supersede, they are essentially suitable for export to other countries, so that the 'Westernization' of popular taste in Japan has incidentally opened up to the small producer entirely new areas of potential demand and endowed his activities with unexpected relevance to the main theme of our study.

In 1936 Professor Uyeda and his assistants prepared some half-dozen reports on small-scale industries in Japan which were presented to the Institute of Pacific Relations Conference of that year.

The following notes and extracts on the woollen, rayon, rubber, electric-lamp, and bicycle industries in Japan will show in the clearest and most concise manner how the transition to modern conditions is being accomplished in small-scale industries and what is their present state. In his memorandum on the Wool Manufacturing Industry<sup>1</sup> Professor Uyeda writes:

'Japan is a very small-scale farming country, where there are a great many peasants who cultivate less than 1 *cho-bu* (2.45 acres) of land. Under such circumstances, farmers had to resort to by-occupations in addition to farming for their living. The weaving

<sup>1</sup> pp. 15-17.



of silk and cotton was the most typical kind of by-occupation in our country. But when the industrial revolution took place in the weaving industry, peasants were compelled either to take up weaving as their principal occupation or to send their wives and daughters who had been pursuing this work at home to factories in other districts as wage-earners. Aichi Prefecture (containing 83 per cent. of all woollen factories in Japan) is a comparatively rich agricultural district which is provided with economic endowments. It was this economic circumstance that made the change from hand-loom to power-loom possible, prevented the district from becoming a mere source of wage-earners and raised the status of the weaving industry from its position as a by-occupation to the status of a principal occupation. . . . The scale of weaving factories in Aichi Prefecture is very small and there has also been no enlargement in the scale [since 1923] . . .'

Professor Uyeda goes on to remark that such small-scale factories are highly adaptable to changes in fashion and in demand, and have recently tended to link themselves with large-scale factories for the co-operative production of patterned cloth, in which they are gradually obtaining a monopoly. Further, the introduction of power looms in these small establishments had apparently largely removed the control which the cloth agent exercised over the small manufacturer, who now sells direct to the city merchants.

Eighty per cent. of the workers in this branch of industry are girls, most of whom are between the ages of 16 and 22, and almost all of whom are farmers' daughters saving money for marriage or, when agricultural conditions are depressed, for the maintenance of their families. Almost all the girls have to live under the same roof as the mill-owner's family, and they receive on the average 70-80 sen (100 sen = 1s. 2d.) a day in wages, of which 15-16 sen is deducted by the employer towards food.

'There was a time when the food provided by some factories was so poor that many girls left discontented. In these days, when demand for labour is greater than before . . . it is obvious that poor meals tend to drive girls away to their competitors' mills. For this reason, much improvement has been realised of late in the matter of food.'<sup>1</sup>

<sup>1</sup> Uyeda, *op. cit.*, p. 28.



Two days a month are allowed for holidays. In the shops employing fewer than 10 workers (which employ about one-fifth of the total labour force) working hours are often in excess of what is prescribed by considerations of health. There is no record of any strikes in the industry, a state of affairs which is stated to be due to the close relations existing between the employers' families and the work-girls.

With such a cheap and docile labour supply it is not surprising that in weaving 83 per cent. of costs are for yarn supplies, labour representing only some 13-15 per cent. (In the making of Japanese-style cloth most of the labour goes on weaving, whereas for Western-style cloth, 11-15ths of the labour cost arises in the finishing of the cloth.) It is easy to see why the exhaustion of the stocks of raw wool bought before the yen depreciation put a check to the expansion of exports. The advantage of these cheaper stocks had been the main factor behind the expansion of the Japanese woollen industry, the lowering in international value of the already extremely cheap labour costs having little effect on total costs.

Rayon yarn is produced only in large factories, most of which employ more than 2,000 workers each. On the other hand, rayon-weaving is carried out mainly by concerns employing fewer than 30 workers, while more than half is produced by workshops with under 5 workers. Many of the factories and workshops were formerly engaged in weaving silk. Among the smaller mills the system of outwork prevails and the weavers are still under the control of the merchant. The proportion of labour to total production costs is low in the case of yarn; in 1933 labour charges represented only some 10 per cent. of total costs; in the weaving of plain cloth, on the other hand, they were responsible for some 55 per cent. In this industry continued expansion has only been possible through a slashing of prices to a level which brings great hardship upon the small producer.

The rubber manufacturing industry dates from just before the Great War and has steadily expanded since

then. In addition to the growth in the home demand for waterproof clothing, there has recently been a large demand for military equipment, electrical insulation materials, and motor-car tyres. In the early stages of manufacture machinery can be used, but most of the remaining processes are carried out mainly by hand even in the larger factories with over 100 workers. The greater part of the output comes from these larger factories, but the large number of small factories which are engaged in some of the processes necessary to the industry has had an important effect in depressing the prices of the products. The rubber industry derived particular benefit from the depreciation of the yen in 1931 owing to the fact that comparatively little capital is required to start rubber factories. The stimulus of the depreciated currency caused a rapid expansion of the export trade, and this led in turn to sharp competition among the exporters. The seriousness of the situation in 1936 is described thus by Professors Uyeda and Odahashi:

‘Reckless sales and dumping become rampant and soon the abusive manufacture of inferior goods is brought about. Because of this fierce competition, the industry as a whole is utterly exhausted and many establishments stand on the brink of bankruptcy.’<sup>1</sup>

Hence, as in other small-scale industries, an attempt has been made to exercise centralized control over production and prices. As regards the labour employed, it is fairly evenly divided among male and female workers. The dormitory system common in the textile industry is not usually found in operation in the rubber factories, which are mostly located in the towns.

The manufacture of electric lamps is in the hands of (a) the huge Tokyo Electric Co., which works under agreements with the international General Electric combine, (b) a few medium-scale independent firms, and (c) several thousand manufacturers

‘with small-scale factories or workshops, scattered in the labourers’ resident quarters of large industrial towns. The equipment in them is still in a very primitive stage . . . some processes are carried on by

<sup>1</sup> Uyeda and Odahashi, *The Rubber Goods Industry*, p. 51.

second-hand machinery and the rest entirely by hand. . . . Of late years they have manufactured articles almost solely for overseas markets. . . . Most of the small "town" electric lamp manufacturers are skilled labourers thrown out of their work by the introduction of the automatic machines into larger factories. The most prominent functionary or pivot of the small-scale "town" electric lamp manufacturing system is the middleman or merchant employer. . . . The merchants, accepting orders from the exporters in Yokohama, buy the materials from the material manufacturers. Then they put out the materials to these small factories or workshops, and let them manufacture the articles.'<sup>1</sup>

Here again the fall in the exchange rate brought about strong competition in the industry and 'the price of flash bulbs, which occupy the major portion of electric lamps exported, dropped from 5.0-5.6 sen to 1.0-1.1 sen per piece in the course of five years (1930-4)'. The depression, however, did not drive the small-scale workshops out of business 'for the greater number of them were able to tide themselves over the difficult straits by reducing wages and living expenses to an utmost minimum'. This has led to a fall in their standard of living and represents 'the darkest side of the Japanese industrial labour situation'.

In the bicycle industry 65 per cent. of the labour is engaged in workshops with under 5 workers. The small-scale unit persists, as 'the only way of manufacturing low-priced bicycles is to combine the use of low-priced machinery with the employment of cheap labour'. The industry is largely a household one, but the 'place of the apprentice who formerly entered employment in order to train himself to become a skilled hand is now being taken by unskilled or juvenile workers'. A third of the workers are under 21, and female labour is not employed much in this industry. Seventy per cent. of the workers come from rural areas. It is claimed that the control of output and quality in this industry has been fairly successful, though prices are still low.

We can realize from these extracts from Professor Uyeda's monographs the wide gulf which separates

<sup>1</sup> Uyeda and Inokuchi, *The Electric Lamp Industry*, pp. 8-10.

labour conditions in the larger enterprises from those in the small workshops employing 10 hands and under. The small 'shop' is the home of Japan's so-called 'family system', the nucleus of such businesses being as a rule the family group, which, assisted by a certain number of outside apprentices, supplies all the necessary labour. Whatever regular remuneration the workers receive beyond free food and accommodation—often of the scantiest kind—is infinitesimal except in the case of those whose work is of a highly skilled nature. Where fewer than 10 workers are employed, the undertaking, unless it possesses a power machine,<sup>1</sup> is outside the scope of factory legislation and therefore altogether immune from inspection. In such cases no check other than that of tradition or the possible influence of relatives or schools exists upon 'sweating', and hours for all classes of labour—women and children as well as men—are practically unregulated. The undoubted improvement in working conditions observed in the larger factories has little or no counterpart where 'family' industry is concerned. Instead, unbridled competition involves the small manufacturer in a continuous struggle to reduce costs of production. This, in turn, drives him to force down conditions of labour still farther, so that he is finally caught within a vicious circle, unless his guild or trade association, or in the last resort the Government, is able to come to the aid of the industry and bring about a co-operative movement for the restoration of price-levels.

This precarious situation of the small producer has for a number of years been engaging the attention of the Government, and under official auspices some progress has, as a matter of fact, already been made towards linking up the scattered forces of family industry by means of price agreements and centralized selling agencies, a description of some of whose activities is given below. A further line of development lies in the possibility of increased co-ordination with existing branches of factory enterprise. This has already proved practicable in several

<sup>1</sup> All workshops which have a power machine are subject to inspection irrespective of the number of workers employed.

industries, a conspicuous example being the bicycle industry, in which components are now being manufactured in small workshops on a contract basis and subsequently sent to the larger factories for assembly. Whatever form it takes, the eventual reorganization of family enterprise on more economic lines, no less than the process of 'Westernization' now invading many of its branches, seems destined to result in a much more systematic attempt to exploit in the *export* field the potentialities of cheap family labour. Already many miscellaneous articles of the kinds mentioned as typical products of the small Japanese undertaking command a widespread sale in areas of low purchasing power, and it seems probable that, as family industry develops further along the lines indicated above, there will be a substantial rise in both the quantity and the variety of such goods entering foreign markets. The advantage which industries organized in small units possess in the matter of providing variety in the quality and design of products is obvious. In practice, it is true, this result has till now been somewhat less conspicuous in Japan than might have been expected.

A final word may be added in order to illustrate the Japanese method of approach to problems associated with industrial relations. In small enterprises, such as we have just described, 'paternal' relations are fostered between the master and his workmen by close personal contact. With the change of scale in industry resulting from the rise of a modern capitalist economy, the relationship has undergone inevitable modifications without any fundamental change of outlook having occurred as far as the majority of Japanese workers are concerned. Ancient concepts of mutual responsibility and duty, deriving from an epoch in which the family was the natural unit in all social and economic affairs, have simply been carried over into modern industrial life, where they underlie much of the welfare work undertaken by Japanese manufacturers for the benefit of labour. The docility which many observers have noted in Japanese workers has its root here. Thus in jealously preserving the atmosphere of

feudal loyalty in industrial life while suppressing all manifestations of a more independent spirit, the employer may feel that he is pursuing a policy of 'enlightened self-interest'.

The menace of industrial unrest does not at present loom very large upon the Japanese horizon. There may not be general concurrence with the view powerfully urged by some Japanese industrialists that the assumption by the employer, without legal requirement, of certain obligations towards labour makes it possible to dispense largely with factory and social legislation, yet the concept of paternalism with all that it implies of loyalty and obedience on the one hand, privilege and responsibility on the other, appears to find instinctive acceptance among the great majority of Japanese workers. Labour disputes, it is true, have tended to grow more frequent in years of high prices but, apart from the occasional communist manifestations of the early thirties, they have been provoked rather by sporadic abuses of the existing system than by any widespread dissatisfaction with that system as a whole. No observer of Japanese social conditions would deny that the feudalistic character of Japanese society accords well with her peculiar needs as an industrial power, for it is generally conducive to harmonious relations between capital and labour, while enabling the industrial structure as a whole to retain a considerable degree of elasticity in the face of changing circumstances.

The weakness of the Japanese unions may be traced to a number of distinct causes, but undoubtedly the chief obstacle with which they have to contend is an impalpable one, arising out of the national bias in favour of paternalism. Although there are some 970 unions in Japan, only 6.9 per cent. of all registered workers are union members. Of the various labour categories, transport workers, and more especially seamen, show the highest proportion of union membership. In the factories, on the other hand, the unions embrace a comparatively small minority of the workers engaged, for not only are welfare services here more highly developed but, as we have

already noticed, a majority of those employed are young girls, who, even if other disabilities were not placed in their way, would have little inducement to join the unions since their period of factory labour is usually of such short duration. In a limited number of industries, however, there appears to be a growing degree of co-operation between unions and employers.<sup>1</sup>

Other factors tending to hamper the unions have been the absence of official recognition and disagreement among themselves as to political and social aims. In 1928 a measure was drafted by the Government which would have removed the first-named disability, but owing to opposition on the part of employers it has not yet reached the statute book. The moderate unions are strongly imbued with nationalist sentiment, which has led them to devote much of their energy towards rebutting communism wherever it raises its head. The left-wing unions, on the other hand, although varying in political complexion from orthodox Marxism to crude anarchism, have been all more or less subversive in tendency. The mutual antagonism of these two groups has exercised a crippling effect upon the movement as a whole. In recent years communism has become a dead cause or has been driven underground, and the only representative of the workers in the Diet has been the moderate Social Mass Party.

### 3. POPULATION, RAW MATERIALS, AND FOOD SUPPLIES

It is a matter of more or less general agreement that many of the features of industrialization observable in Japan are the result of the pressure exerted by a rapidly increasing population. As Professor Penrose<sup>2</sup> has emphasized in his recent book, however, the term 'over-population' is essentially relative. To attribute social and economic tendencies to over-population is clearly insufficient unless at the same time we indicate the sense in which the term can be said to apply to the particular country

<sup>1</sup> See reports on the electric-lamp and enamelled-ironware industries by Professor Uyeda and his assistants.

<sup>2</sup> Penrose, *Population Theories and Their Application*, 1934.



or region under discussion. If, for example, a rising level of *per capita* income can be taken as evidence that over-population does not exist—and this view has the support of several leading economists—then, as far as available information goes, there was, at any rate until the world depression, no justification for regarding Japan as over-populated. Professor Penrose rejects this definition, however, in favour of another which makes real income the necessary criterion, and by real income is implied that proportion of gross *per capita* receipts which is available for the purchases of food, clothing, and other commodities contributing directly to economic welfare. Applying this criterion to Japan, we observe that the level of economic welfare attainable on a given gross income was rising gradually in the case of industrial workers, but for certain classes of rural workers, particularly the tenant farmers, it was falling or stationary. Although the decline in the *per capita* economic return from farming has no doubt been accentuated by temporary factors, it must be attributable primarily to the state of over-population or under-employment prevailing in agricultural areas. Regarded in this light, Japan's population problem exists not in any absolute sense but rather as the result of an internal maladjustment requiring for its solution the establishment of a different equilibrium as between agriculture and other occupations.

As will be pointed out later in this chapter, the possibilities of enhancing the fertility of the soil through more scientific methods of cultivation and so of raising the economic return from farming are probably not yet exhausted. It becomes increasingly apparent, however, that such possibilities cannot be fully realized without reform of the land system, involving some reduction in the number of those now engaged in agriculture or the provision of subsidiary rural industries. In any final analysis, therefore, Japan's population problem resolves itself into one of creating alternative openings for labour which can no longer be utilized economically in farming, fishing, and kindred pursuits.



While it is mainly through development of industry that Japan aims at effecting the economic readjustments which are necessary if she is to rid herself of agricultural over-population and so to secure the maximum of economic welfare for her people, the possibility of increased absorption of labour by 'indirect' services ought not to be overlooked. To judge by facts set forth by the Tokyo Association for Liberty of Trading in their Bulletin No. 3, dealing with occupational changes in Japan, there was between 1920 and 1930 an increase of employment in the three occupational groups classified as trade, public and professional service, and domestic service which went far to absorb the natural growth of population during that period and so to prevent any serious aggravation of the unemployment problem. The following passage from the above-mentioned publication may be quoted in full:

"Thus, while the total population increased 14 per cent., the increase of the persons engaged in trade reached 39 per cent. (1,317,000) and that of the persons in public and professional service, 37 per cent. (541,000). The increase in domestic servants was not so great, but amounted to 21 per cent. (140,000). These three groups together showed an increase of almost two millions, far exceeding the increase in the total persons engaged.

'It must be noted here that the meaning of the term "trade" as used in our census is very wide. In addition to wholesale and retail trading, it includes banking and insurance, theatres and cinemas, hotels, restaurants, bath-houses, and barbers' shops. The total number engaged in this group in 1930 was 4,435,000, of which those engaged in wholesale and retail trade occupied 70 per cent. (3,260,000), and those in personal services 26 per cent. (1,140,000). The number of the members of households, the heads of which were engaged in "trade", was 2,094,000 which almost equalled that of the members of industrial households. Its proportion to the total population rose from 13.4 per cent. in 1920 to 17.4 per cent. in 1930. Professor Charles Gide, a veteran French economist, pointing out the enormous increase of those engaged in trade in France, once said (in his *Principes d'Economie Politique*) that if the rate of increase were to continue, all Frenchmen would become tradesmen in two centuries. A similar situation exists in Japan to-day.'

The extent to which such trade openings can normally be developed is strictly limited, however, and after their rapid expansion of recent years they may not inconceivably be nearing in Japan a point of temporary saturation. On the other hand, one of the striking features of Japanese commerce is the large numbers of employees required to carry out functions which in the West require only a few, and it is still conceivable that the growth of openings in industry will provide at least an equal number in commerce.

The only remaining channel into which further additions to the population might partially be drawn is that of emigration. In considering this as a possible outlet it should be borne in mind, however, that during the decade 1924-34 net emigration amounted only to some 65,000, that almost without exception foreign avenues are now closed, that territories under Japanese control such as Manchukuo have mostly proved unsuitable for normal types of colonization, and finally that the Japanese is strongly attached to his native land and social organization. Even Hokkaido is still only thinly settled. Although the army is planning the settlement of 1 million emigrants during the next twenty years in Manchukuo, under group schemes, emigration is unlikely to be a major factor in solving Japan's employment problem, though it may gradually grow in importance.

If, as it would seem, industrial expansion has been forced upon Japan by the exigencies of her population problem, the particular character assumed by this industrial expansion has been determined by her position in regard to natural resources. In a country with a very limited supply of raw materials, the growth of industry is almost certain to require an extension of international trade. To a greater extent, therefore, than any of the more highly industrialized countries of the West, Japan has been obliged in building up her modern industries to concentrate mainly upon manufacture for export<sup>1</sup> and

<sup>1</sup> *Japanese Trade and Industry* (Mitsubishi Economic Research Bureau) gives the ratio of exports to production in a number of important industries

upon the development of foreign commerce. Since, moreover, the greatest commercial possibilities offered themselves in those branches of manufacture which depended upon a somewhat narrow range of domestic raw materials or else which consumed materials of small weight and relatively high value obtainable from abroad without heavy transportation cost, industrialization tended to be intensive rather than extensive. Thus it has come about that silk-reeling in the first category, cotton-spinning and -weaving, wool-weaving, and rayon production in the second, together comprise by far the largest single group of industries in the country, and contribute some two-thirds of the value of its exports.

So important is the bearing, both actual and potential, of the raw-material factor upon Japan's economic future, that we feel justified in devoting this part of our chapter to its fuller consideration. While our survey of the subject will necessarily be brief, it should suffice to show how Japan is at present situated in regard to essential supplies and also to emphasize one or two more recent developments, which may tend to modify this situation in future.

Silk-reeling is the only major Japanese export industry to have its roots entirely in domestic raw material. As a producer of raw silk Japan has long since outstripped China and now accounts for by far the largest share in the world's output of this commodity. Her cotton and woollen industries, on the other hand, depend almost wholly on foreign supplies. The present production of cotton within the Japanese Empire is equivalent to about 1 per cent. of domestic consumption, while at the same time cultivation on a greatly extended scale seems scarcely feasible. As regards wool production, the potentialities of Japan proper are almost non-existent owing to her traditional reliance upon agriculture and forestry, which has led to an almost complete absence of feeding grasses, except in Hokkaido. It has yet to be seen how far

in 1933 as follows: cotton textiles 54.4 per cent., rayon textiles 72.7 per cent., knitted goods 57.1 per cent., pottery 41.8 per cent., raw silk 78.5 per cent.

the recent twenty-year plan for encouraging the raising of sheep in Manchukuo can be realized. If successful it may enable Japan to obtain part at least of her rapidly growing raw-wool requirements from a source under her own control, but after an investigation on the spot Australian experts have expressed their conviction that the conditions in Manchukuo are not at all favourable to the large-scale breeding of a good type of wool-bearing sheep. In the meanwhile, Japan will have no choice but to continue to import her wool, almost entirely from countries lying outside the Japanese Empire.

Despite the fact that her greatest natural advantages lie in the field of light manufacture, Japan has, as we have seen, spared no effort in building a heavy metallurgical industry, and in basing upon it numerous branches of heavy and light engineering. The efforts now being made to attain Japanese self-sufficiency in this direction seem destined, however, only to emphasize her dependence elsewhere, for the future of the new engineering and machine industries, which she seeks to extend, is necessarily bound up to a large extent with the possibility of obtaining at an economic price certain basic metallurgical products such as steel, pig-iron, copper, and aluminium. These materials are bulky and therefore costly to import from a distance, and for a number of years, at any rate, cheap skilled labour will not be available as a set-off to these high costs. It follows that a new urgency is being given to Japan's raw-material problem, which will compel her to exploit to the uttermost possible extent such limited mineral resources as are available within the Japanese Empire or in China. What then, we may ask, is the actual extent of these resources as at present ascertained?

An extension of the machine industries is calculated above all to increase the consumption of steel. Steel production on an economic scale requires, however, the presence of adequate reserves of commercially exploitable iron ore, fuel in the form of good coking coal, and either the geographical proximity of these two minerals or cheap and efficient means of transportation making it possible

to bring them together. In none of these respects is Japan ideally situated, and as regards iron ore her deficiencies are exceptionally marked, the highest estimate of total reserves in Japan proper being placed at 90 million tons, a figure which is hardly equivalent to a single year's production in the U.S.A. Formosa has no reserves at all, and those at present assessed in Korea do not exceed 40 million tons. Manchukuo possesses reserves estimated at roughly 1,220 million tons, but the ore here is generally of too poor a quality to repay long-distance transportation (its metallic content rarely exceeding 35 per cent.). To be of any economic value it must be processed on the spot and large sums have therefore been invested in the plants at Anshan and Penhsihu with the object of creating a local industry. Only a third of Japan's average annual ore requirements are actually mined at home or in Korea, the remainder being imported principally from China, Malaya, and Australia.<sup>1</sup> If it were necessary to supply the iron and steel requirements of the country entirely from domestic and Korean sources all the Japanese ore deposits would at the present rate of consumption be exhausted in about twenty years.

About three-quarters of the average annual quantity of pig-iron consumed is smelted in the Japanese Empire, while the bulk of the remainder comes from British India and Manchukuo. Ninety per cent. of Japan's supply is derived from sources under Japanese control, as against approximately 33 per cent. of her iron ore. A few years ago there was a huge increase in the tonnage of scrap imported for the industry, which came from the U.S.A. and—in the form of ships for breaking up—from a number of other countries. The import of scrap (not including ships) was as high as 1.7 million metric tons in 1935. High world prices have since then reduced this trade.

<sup>1</sup> A Press report from Perth, Western Australia, published in *The Times* on Feb. 13th, 1938, announced the completion of plans for the production of 1 million tons of iron ore annually at Kooland Island, Yampi Sound. The exploiting company contains Japanese interests and the entire output will, it is stated, be shipped to Japan.

As regards coal of coking quality, Japan appears at first sight to be more favourably situated. The quantity imported, though tending annually to increase, is still comparatively unimportant, as is shown by the following figures, which relate to domestic production and consumption during the period 1929-34.

PRODUCTION AND CONSUMPTION OF COAL, 1929-34  
(In thousand metric tons)

<i>Year</i>	<i>Production in Japan, Korea, and Formosa</i>	<i>Consumption in Japan</i>
1929	37.4	33.2
1930	34.5	29.5
1931	31.0	29.1
1932	31.2	29.4
1933	36.3	34.5
1934	40.3	38.9

Although up to the present the home demand for coal has been met almost entirely out of domestic resources, there is every indication that the future will bring an increased dependence upon imports, particularly in regard to coal of good coking quality. The total workable reserves in Japan proper have been estimated at about 16,690 million metric tons,<sup>1</sup> representing a *per capita* reserve of only 238 tons, as compared with 4,070 tons *per capita* for the United Kingdom, 3,921 tons for Germany, and 27,501 for the United States. As much of her reserves are poor in quality and difficult to mine, Japan cannot be said to be well off in coal. It must be remembered, however, that she also has abundant water power and forests which produce her domestic fuel—charcoal.

Little assistance in this respect is to be looked for from the Japanese colonies, although there are limited coal deposits in Karafuto, Formosa, and Korea. Turning, however, to Manchukuo, we find deposits estimated at 6,980

<sup>1</sup> Figures published by the Bureau of Mines, Tokyo, 1932, and quoted in *Japan Year Book*, 1935. These figures are approximately double those of the 1911 estimate.

million metric tons<sup>1</sup> which supplied to Japan between 1933 and 1935 about  $2\frac{1}{2}$  million tons a year or 68.8 per cent.<sup>2</sup> of the total coal imports into Japan during that period. Of the total coal output, about two-thirds comes from the great 'open-cut' mine at Fushun, where production costs have been estimated at less than 1 yen per ton. Competition from low-cost Manchukuoan coal has given rise, however, to a demand on the part of domestic Japanese producers for a curtailment of imports in the interests of the local mining industry, and in 1932 a limit to purchases from Manchukuo was fixed, though substantially not observed. The position as regards competitive production in Manchukuo is discussed more fully later, and it will be sufficient to indicate here the probability that, whatever restrictions be placed upon imports into Japan at the present time, the coal reserves of Manchukuo will serve in the long run as a useful adjunct to those of Japan. As for Chinese supplies, these are very considerable, as has been shown in the chapters on China, but their availability to Japan depends upon future political developments, the discussion of which lies outside the scope of this work.

In the two preliminary stages of the metallurgical process, namely ore and pig-iron, the Japanese Empire is, as we have seen, dependent to the extent respectively of 66 and 25 per cent. upon imports. In the final stage, however, involving the production of steel, her independence of outside sources is now almost complete. The average annual output of steel in Japan during the five-year period 1927-31 was equivalent to 80 per cent. of home consumption, a balance of 20 per cent. only being accounted for by imports from abroad. By 1934 domestic production was greater than consumption and since then a considerable export trade (mainly to Manchukuo) has developed. In fact Japan was in 1935 the sixth producer in the world, France being the fifth. Nevertheless, as has been pointed out by the authors of the *Economic Handbook*

<sup>1</sup> *Japan and Manchukuo Year Book*, 1938 (1936 estimate).

<sup>2</sup> Mitsubishi, *Japanese Trade and Industry*.



*of the Pacific Area*, in 1934, this self-sufficiency is on a somewhat precarious basis.

‘The Japanese situation in the iron and steel industry, starting on a basis of alarmingly inadequate ore reserves, gradually becomes more secure along the metallurgical process until in certain manufactured steel products the entire demand is produced at home. This security is, in the minds of many Japanese and foreign observers, that of an inverted pyramid, the base of which—in this case control of iron reserves of adequate quality for metallurgy—must be broadened.’

Owing to her lack of natural resources, Japan has been, as we have seen, driven to make extensive use of scrap as a substitute for pig-iron, her imports in 1935 amounting to 1·7 million tons scrap, 3·4 million tons of iron ore, and 1 million tons of pig-iron. Since, however, the possibility of obtaining scrap at profitable rates is liable to be modified at any time by changes in world conditions, and in fact has fallen off greatly with recent high prices, it would be easy to exaggerate the importance of this as an auxiliary source of raw material. If therefore, despite numerous natural handicaps, Japan has steadily increased her production of steel and has even entered the field as an exporter, the explanation lies in the unremitting efforts made by the Japanese Government to promote the steel industry, in which incidentally it has a preponderant interest through its participation in the Japan Iron Manufacturing Co. founded in 1934. This syndicate produces almost all the pig-iron output of Japan and Korea and nearly 60 per cent. of the steel. Domestic production has been encouraged by subsidies and protective duties. It has also lately been rationalized through the medium of compulsory mergers. Pending a solution, however, of the problem of ore supplies, with which North and Central China are well endowed, the intrinsic weakness of the industry remains unaltered.

Ranking next in importance after iron and steel among materials entering into the machine and engineering industry are the non-ferrous metals—copper, zinc, lead, tin, and aluminium—and alloys. We may then conclude our



survey of the raw-material situation, in so far as engineering industries are concerned, by considering briefly how Japan is at present situated in regard to each of the above.

Apart from coal, copper is Japan's only mineral resource of any importance. Until the Great War she was the world's second largest producer, but the development of new producing areas in Africa and South America has since had the effect of displacing her from this position. In response to an increasing industrial demand, output continued to expand, rising in 1930 to a peak figure of 79,000 tons. In 1935 total production amounted to 69,000 tons, and 70,000 tons were imported. Mining costs in Japan are high, and since 1931 producers have incurred severe losses as a result of the world decline in prices, but in view of the great importance of copper in all branches of electrical engineering it is reasonable to anticipate an eventual price recovery which will once more make profitable the exploitation of Japan's reserves of the metal. In any case the possession of these reserves in an age increasingly wedded to the use of electricity constitutes for Japan an industrial asset of major importance.

Lead and tin both occur in Japan, but in quantities insufficient to cover more than an insignificant share of the home demand. The quantities obtainable in Manchukuo are likewise negligible. In the case of zinc, domestic sources provide about half the annual quantity consumed.<sup>1</sup> Aluminium, which formerly had all to be obtained from abroad, as Japan had no bauxite deposits, is now being made in Japan from Korean alum-stone by an electrolytic process, and plants are being started in Manchukuo for the use of alum-shale. It is claimed that when all these plants get into full operation Japan will be self-sufficient and will have an export surplus. The costs of production, however, have yet to be ascertained.

<sup>1</sup> According to figures given in *Nippon, A Charted Survey*, domestic output of zinc provided 28 per cent. of home demand, of lead 7 per cent., and of tin 33 per cent. Nickel, antimony, mercury, and manganese ore supplies had to be obtained almost completely from abroad. There is, however, a considerable domestic production of chromium and manganese.

Having demonstrated the extent of Japan's dependence upon foreign sources in the case of certain essential metallurgical products, we must now consider a second factor which has an important bearing upon her industrial prospects, namely, her position in regard to motive power. Reference has been made already, in another connexion, to Japan's reserves of coal fuel, and we may therefore here confine our attention to petroleum and hydro-electric generation, the two alternative sources of power which are of importance to a modern industrial State.

Japan's consumption of petroleum products has been increasing steadily for some years. Domestic resources are extremely meagre, and of late on an average about 90 per cent. of the home demand has been met by foreign supplies which are of such dimensions (182 million gallons in 1936) that crude and refined oil have become Japan's third largest import, ranking next in value after raw cotton and wool. As regards the refined products, petrol, kerosene, &c., domestic refineries now satisfy about 38 per cent. of Japan's demand. Of the total oil imports into Japan approximately one-half is in refined form. Neither in the Japanese colonies nor in Manchuria are important oil-fields known to exist, but at Fushun in Manchuria extensive deposits of oil-shale cover the main coal-seams. With a view to exploiting these, the South Manchurian Railway Co. has erected a distillation plant at which the production of oil and by-products was begun in 1930. According to estimates made by the above company some 200 million tons of petroleum are said to be extractable, but the cost of production is at present high. In 1935 the output amounted to 67,000 metric tons of heavy oil, and 16,000 tons of petrol were produced. The Japanese oil-mining concession in North Sakhalin produced in the same year 164,000 tons of petroleum.

The anxiety of the Japanese Government to develop sources of supply under its own effective control can readily be understood in view of the difficulties which under modern conditions would soon overtake the national defence forces if, in an emergency, foreign supplies of oil

were to be cut off. Considerations of national security, outweighing all purely economic interests, are responsible for the official encouragement given to the Fushun enterprise, and in particular for the fact that the Navy Department has recently contracted to take a considerable proportion of its annual output. Similar considerations have inspired legislation compelling foreign oil companies domiciled in Japan proper to increase their storage capacity up to a point at which they will be able to accommodate a six months' supply, thereby rendering the danger of a sudden shortage less acute. It has not been possible to carry out the legislation in its entirety, but oil stocks have increased considerably.

In regard to these precautions for ensuring supplies of oil, a further factor to be borne in mind is that Japan has no direct and jealously guarded interests in oil concessions abroad comparable to those possessed by Great Britain in Iraq, Persia, and elsewhere, and so is exposed to the risk of finding herself denied all means of access to the major producing areas. Mention has been made already of the concession in North Sakhalin granted to a Japanese corporation in 1925 by the Soviet Government. A further concession is held in North Borneo. These two sources yielded in 1935 less than 5 per cent. of Japan's imports of mineral oils from all sources.

Although by no means lavishly endowed with natural riches, Japan has yet in one respect been favoured by nature beyond the common measure. To quote Mr. Orchard:

'The same rugged topography that has limited agriculture, combined with a humid climate, has endowed Japan with excellent water-power resources. The streams are short and turbulent and owing to the character of the precipitation and to the numerous mountain lakes that act as storage reservoirs, their flow fluctuates little from one season to another. The small size of the islands and the proximity of the industrial centres to power sites reduces the cost of transmission, an item that has proved to be a serious obstacle to power development in other countries.'<sup>1</sup>

<sup>1</sup> Orchard, *Japan's Economic Position*, p. 50.

In her water-power Japan possesses, in fact, an asset which in certain directions does much to compensate for her deficiencies in regard to oil and coal. The fuel value of her hydro-electric output was estimated as far back as 1931 to equal that of 15 million tons of coal, and has since doubled. Only one-third of these resources is said to have been developed.<sup>1</sup> Nor does its importance end here, for, as Mr. Orchard further suggests, it may well have a highly significant function to fulfil in preserving and enlarging the scope of those small-scale domestic industries whose economic existence recent industrial developments have tended to jeopardize.

‘The further development of hydro-electric energy is to be expected. It may have a determining influence upon the trend of Japanese industrialization. The ease with which it can be distributed and subdivided makes possible the decentralization of manufacturing away from the urban centre and into the small unit, a development highly desirable in Japan with a predominantly rural population attached to farm and village and somewhat slow in seeking employment in the city factory.’<sup>2</sup>

Japan ranks after the United States and Canada as the world's third largest producer of hydro-electric power,<sup>3</sup> and is fifth in the world as a producer of electricity. Power for industrial use has long been available in the chief urban centres and virtually all the large modern textile factories are equipped with electrically operated machinery. More recently the remoter country districts have been embraced within the national transmission system, so that to-day there is scarcely a village in Japan lacking the benefits of electricity. Striking evidence, moreover, of the trend towards the subdivision and decentralization alluded to above is supplied by figures relating to electric motors. According to the *Japan-Manchukuo Year Book* for 1935 the

<sup>1</sup> Ishii (R.), *Population, Pressure, and Economic Life in Japan* (King, 1937), p. 222.

<sup>2</sup> Orchard, *op. cit.*, p. 50.

<sup>3</sup> According to particulars given in Sir George Sansom's report for 1936 the total capacity of all generating stations was  $5\frac{1}{2}$  million Kw., of which about 60 per cent. was generated by hydro-electric power. Additional capacity giving about 2 million Kw. (mainly hydro-electric) was stated to be under construction.

number of these in use rose from 192,017 in 1922 to 565,602 in 1932. Average horse-power per unit appears, on the other hand, to have declined from approximately 90 h.p. to between 60 and 70 h.p., thus indicating a proportionately larger increase in the number of low- and medium-powered motors of the types most likely to be used by the small manufacturer, and this introduction of electrical power into the service of the small family business enormously increases the range of the latter as a producer of cheap miscellaneous goods for both home consumption and export. A further potential source of power for industrial uses in Japan, supplementing hydro-electric installations, is low-temperature carbonization on the coal-fields.

Elsewhere in this book a comparison is drawn between Japan and Great Britain in regard to their dependence on manufactured exports for the provision of the raw materials and foodstuffs required for sustaining or raising the national standard of life. We have dealt now with Japan's provision of raw materials; it remains to consider her position in respect to supplies of food.

Up to the present time Japan, with the help of her colonial territories, has been relatively self-supporting in the matter of food staples. In 1936 food, drink, and tobacco accounted for about 8 per cent. of all imports into Japan as compared with 51 per cent. in the case of Great Britain. They represented about the same proportion of her exports, which in recent years have included a substantial quantity of manufactured foods, chiefly canned fish and fruits. Neither is the position in the immediate future such as to give ground for alarm. The traditional frugality of the Japanese people, combined with the fact that the chief articles of daily consumption for all classes of the population, namely rice, fish, and vegetables, are obtainable in abundance within the Japanese Empire, indicates that, even with a rising standard of living, there need not for the next few years be any very substantial increase in imports of foodstuffs from foreign countries. Indeed, the most serious problem which the Government

has had to face in this field has arisen, as explained elsewhere, through the superabundance and not through the scarcity of the Japanese 'staple of life', namely rice.

We have, however, to consider whether, at the present rate at which the Japanese population is increasing, pressure upon the means of subsistence will not seriously develop within the next generation; whether, in fact, the growth of a large industrial population will not presently place Japan, as it has the more highly industrialized countries of the West, in a position of far greater dependence upon foreign food imports than is at present the case.

Estimates differ rather widely both as to the extent of the annual increment which the Japanese population will receive over the next decade or so, and as to the point at which, for sociological reasons, it is likely to become stationary. The study made by Professor Uyeda<sup>1</sup> tends to dissipate some of the more extravagant notions entertained on this subject. Briefly summarized, Professor Uyeda's conclusions are as follows:

1. That 'the population of Japan can never reach 100,000,000, which is imagined as the possible future population, and it will stop probably at about 80,000,000 in some twenty years' time'.
2. But that 'the number of working population in 1950 will be larger than that of 1930 by 10,000,000'.

Assuming, on the basis of Professor Uyeda's calculations, that over the next two decades the Japanese population will increase<sup>2</sup> at the average rate of approximately 650,000 per annum, we must proceed to inquire how far the productive capacity of the Japanese Empire can be extended to meet an inevitable increase in the domestic demand for rice and other essential foodstuffs. For the five-year period 1927 to 1934 the annual *per capita* consumption of rice averaged 1.092 *koku*<sup>3</sup> as compared with

<sup>1</sup> Tokyo Association for Liberty of Trading, Bulletins Nos. 1 and 3.

<sup>2</sup> The latest Japanese official calculations of 'national' increase are as follows: 1935, 1,028,768; 1936, 935,000; first 6 months of 1937, 562,659 (comparing with 508,990 for the corresponding period of 1936).

<sup>3</sup> *Japan-Manchukuo Year Book*, 1935. 1 *koku* = 4.96 English bushels.

1.07 in the ten years before the Great War. It must be remembered, however, that this period includes several years of acute industrial and agricultural depression during which consumption was at a low ebb. In the preceding period consumption had averaged 1.14 *koku per capita*, and there seems little reason to suppose, even allowing for gradual changes of diet reducing the supreme dependence on rice, that this level will not again be approached in the near future.<sup>1</sup>

Taking 1.10 *koku* per annum, therefore, as an estimate of *per capita* consumption, and assuming that Japan's population will have increased by 1950 to a figure in the region of 78 millions, the total Japanese consumption of rice in the latter year works out at roughly 85 million *koku*.<sup>2</sup> Turning to Japan's actual rice budget at the present time, we see that the total annual supply of new rice during the past few years has been some 65 million *koku* plus about 13 million *koku* imported from Korea and Formosa. Looking back over several years, the following figures show the trend of rice production and consumption:

### JAPAN'S RICE BUDGET<sup>3</sup>

(In million *koku*)

	<i>Produced in Japan</i>	<i>Imported from colonies</i>	<i>Total</i>	<i>Consumption</i>	<i>Consumption per capita.</i>
1928	60	+ 11	= 71	70	1.129
1929	60	+ 9	= 69	69	1.100
1930	67	+ 9	= 76	69	1.076
1931	55	+ 11	= 66	73	1.126
1932	60	+ 12	= 72	66	1.014
1933	71	+ 13	= 84	72	1.095
1934	52	+ 14	= 66	77	1.148
1935	57	+ 13	= 70	71	1.043
1936	67	+ 14	= 81	..	..

<sup>1</sup> Some Japanese authorities estimate that consumption will reach 1.25 *koku* per head by 1957. See Ishii, op. cit., pp. 178-9.

<sup>2</sup> Taking the higher estimate of consumption, 1.25 *koku*, the total would be about 100 million *koku*.

<sup>3</sup> See *Japan Year Book*, 1938.



It will be seen that in most of the above years the supply of rice surpassed, or at any rate equalled, the demand. Moreover, roughly 90 per cent. of this demand has been covered by home supplies.

Professor Nasu believes that the area available for these home supplies cannot be greatly extended. He writes:<sup>1</sup> 'The exploitation of arable land in Japan proper *except for Hokkaido*<sup>2</sup> has already reached a climax leaving little room for further reclamation even with the very extensive and painstaking assistance of the Government.'

According to Mr. Ishii, plans were nevertheless made before the depression for the addition of some 5 million acres of new land in Japan proper to the rice-growing area, which would bring increased supplies of some 36 million *koku*. There is, also, at least a theoretical possibility of increasing the yield per cultivated unit of area through more scientific methods of cultivation and of land distribution. The generally quoted estimate, endorsed by Professor Nasu, gives 25 per cent. as the potential future increase in the per *tan* production of rice obtainable 'through the gradual improvement of social and economic conditions as well as by constant effort to improve technical skill in farming work'.<sup>3</sup> The above-cuoted writer estimates that an additional 631,000 *cho*<sup>4</sup> might be brought under cultivation and mentions 87 million *koku* as the maximum figure of potential productive capacity for Japan proper. To attain this latter figure, however, within the next two or three decades would call for a combination of favourable circumstances such as may very well not be realized in such a comparatively short time. It is highly probable, if not certain, therefore, that the two principal rice-producing dependencies, Korea and Formosa, will be called upon to supplement to an ever increasing degree the

<sup>1</sup> Nasu, *Land Utilization in Japan*, I.P.R., 1929.

<sup>2</sup> This is, however, an important exception as Hokkaido has only 3 million people in an area equal to one-quarter of the whole of Japan proper.

<sup>3</sup> It has been pointed out by several expert writers that, to maintain the fertility of Japanese soil, fertilizers are having to be used at a rate of increase disproportionately great as compared with the resultant increase in crops.

<sup>4</sup> 1 *cho* = 10 *tan* = 2.4506 acres.



deficiency of home production, and the question then arises: 'Can production in these areas be expanded fast enough to meet the demand that is likely to eventuate?'

Before proceeding to consider the answer to this question or to arrive at final conclusions, we must first look at the situation in regard to other foodstuffs than rice. Indispensable though rice is, the proportion of other cereals entering into the Japanese diet is on the up grade, especially in regard to wheat, and there are grounds for expecting that any rise in the Japanese standard of living will accelerate the tendency to turn from rice to wheat consumption. At present about  $1\frac{1}{2}$  million acres are under wheat in Japan, compared with 8 million acres under rice. Till 1933 the average domestic production of wheat over a number of years had been in the region of 6 million *koku* a year, but an extension in the acreage sown was accompanied by an increase of output which raised the figure to 9.7 million *koku* in 1935. Average annual consumption has been 9-10 million *koku*. In most years Japan has imported a net amount of about 3 million *koku* of wheat and wheat-flour, of which all but a fraction comes from Australia, Canada, and the United States, but this in recent years has been almost balanced by an export of wheat-flour to Manchukuo.

An increase in Japan's consumption of wheat would have the effect either of reducing her exports or of enlarging her imports of the grain. Actually, her *per capita* consumption of wheat has not increased during the past ten years, the additional production being explained by the higher requirements due to a growing population and to her export trade in flour, and there seems little reason to suppose that wheat is to any considerable extent supplanting rice in the Japanese dietary.

Although in the cities rice accounts on an average for 43 per cent. of all expenditure on food,<sup>1</sup> there are other foods which hold a permanent place in the national diet, chief among them being sweet potatoes, marine products

<sup>1</sup> See Uyeda and Inokuchi, *Cost of Living and Real Wages in Japan*, 1936.

(innumerable varieties of fish and seaweed), barley, eggs, fruits, salt, sugar, and soya-beans. Of the foregoing only beans and sugar require to be imported in any quantity. The former, however, can be obtained in abundance from Manchukuo, leaving sugar as the only 'necessity' which must be imported principally from sources outside the Japanese Empire. The potentialities of Formosa as regards sugar-cane have yet to be fully exploited. So far costs of production are higher than in other leading producing countries.

A marked general rise in standards of living would perhaps result in a more rapidly increasing demand for the products of animal husbandry—meat, milk, butter, &c.—which up to the present have figured only to a very limited extent in the dietary of the average Japanese, but become more important as the number of urban workers grows. Owing to the almost complete absence of natural facilities for grazing, this demand, if and when it materializes, will have to be met mainly by imports.<sup>1</sup>

We will now revert to the central point of the problem, namely Japanese rice supplies, which we put aside in order to pursue the question of supplementary foodstuffs. We left unanswered the query whether colonial production of rice is capable of sufficiently rapid expansion to keep pace with the probable increase in Japan's consumption requirements. Taking Korea first we find that Japan now imports thence an average of 7 million *koku* a year. The Koreans themselves replace this export of rice by cheaper grains, particularly millet, grown locally or imported. So long as conditions in Korea oblige that country to part with its more valuable crop and live on a cheaper product, Japan may expect to obtain the major share of any future increase in Korean rice production. That

<sup>1</sup> The production of pork, which is rapidly gaining favour in Japan, is now about five times as great as in 1913. In the production of milk, which has more than doubled since 1923, Hokkaido is responsible for a large part of the output. Whether the nutritive value of Japanese dairy products can be raised to the level of that in other countries remains to be seen.

conditions generally favour such an increase seems to be beyond reasonable doubt. To quote Professor Nasu:

‘. . . the utilization of land for agricultural purposes in Korea is as yet in a much earlier stage than in Japan proper. Although there is little prospect of further expansion of farm land, the prospects for better utilization of the present arable land area are rather bright. In other words, there is room for further improvement of farm land. Further assistance may be expected from the Government for such purpose by means of a special plan laid down as described above and also from private individuals as well as corporations. . . . With all these factors working together, there will be steady development in land utilization in Korea hereafter.’<sup>1</sup>

He observes in a later passage:

‘. . . the Governments of Korea and Formosa now declare that at the end of the next thirty years they expect to be able to send respectively 31,000,000 *koku* and 8,700,000 *koku* to Japan proper annually. Considering the physical conditions in Korea and Formosa, we can hardly deny the probability of reaching such figures in time.’

Taking the case of Formosa, the island now sends to Japan proper about 3–4 million *koku* annually. Nasu estimates that by improved methods of cultivation a further 1 million *koku* annually could be made available for export without much difficulty, and he indicates in the second of the two passages quoted above that this would by no means exhaust the potentialities of the island. Mr. Ishii, however, is less optimistic concerning overseas supplies. He says of colonial rice imports:

‘However, these proposals overlook many obvious difficulties. First, although the colonial cultivation of rice is at present expanding and its free flow into Japan proper is upsetting agriculture in the latter, it is perhaps erroneous to expect the colonies to remain rice exporters at the rate proposed for the coming thirty years. Their living conditions are improving rapidly. In the event that the *per capita* consumption of rice in Chosen [viz. Korea] reaches the Japanese level, Chosenese consumption would be 21,250,000 *koku*. This is 5 million *koku* above the three-year average yield in Chosen during 1930–2. As a means of relieving the pressure of Chosenese rice, the Japanese Government decided

<sup>1</sup> Nasu, *Land Utilization in Japan*, p. 231.

by concrete means, to encourage the consumption of rice in Chosen. This process will be slow to take effect. Nevertheless, in addition to the population increase in Chosen, the increase in the *per capita* rice consumption is certain to affect the rice exports of that colony. The same is true of Taiwan.<sup>1</sup>

The future position is obviously a matter of speculation, and it is hardly possible to judge to what extent Professor Nasu's expectations need to be modified on account of such arguments as Mr. Ishii brings forward.

Over the past seven years the rice crop in Japan proper is shown, by the figures quoted on page 140, to have averaged approximately 60 million *koku* annually. The possibility of achieving a really substantial increase over this quantity has, as we have seen, to be considered somewhat remote. We may therefore presume that by 1950, when consumption should be in the region of 85 million *koku* per annum,<sup>2</sup> the deficiency to be made up by imports, colonial or otherwise, will hardly be less than 25 million *koku*. If the official estimates quoted by Dr. Nasu for future supplies from Korea and Formosa come at all near to being correct, the two rice-producing dependencies together will eventually be capable of supplementing the crop in Japan proper to the extent of about 40 million *koku* annually. Such possibilities belong to the more distant future and are at the best conjectural, but there seems no reason to expect that the remarkable expansion in colonial rice production witnessed over the past ten years will not be maintained, in which case by 1950 aggregate imports from Korea and Formosa may well be in the region of, say, 20 million *koku*.

We are therefore led to the conclusion that, while in Japan proper the nation's requirements of rice, and perhaps of some other staple foods, will soon outstrip domestic supplies and keep growing rapidly larger till a date at least fifteen years hence, yet taking the Japanese Empire

<sup>1</sup> Ishii, *op. cit.*, pp. 180-1.

<sup>2</sup> Mr. Ishii quotes other estimates which are round about 100 million *koku*, but his conclusions are almost identical with those reached here. Ishii, *op. cit.*, pp. 178-84.

as the unit of calculation (which would seem the correct method when viewing the problem from the particular angle of the study contained in this book), there is a possibility at least that the balance between production and consumption of staple foods will remain comparatively undisturbed, and that Japan will be able to avoid any very substantial increase of her present food imports from foreign countries. This is on the assumption, of course, that no violent changes occur in the composition of her diet and that she does not develop a greatly increased appetite for types of food—wheat, meat, animal fats, and milk—which her empire cannot supply in adequate quantities. We must remember that the unexpected often happens in Japan, as the figures of wheat and dairy production show.

Such a conclusion runs counter to what is perhaps the commonly held view, and, if correct, has an important bearing on the strength of the 'urge' impelling Japan to expand manufactured exports in order to feed herself. It implies that the compulsion to export is due to lack of command over raw-material supplies rather than to lack of food. One has to consider, however, that the mere fear of food shortage—even though that fear may prove in the end ungrounded—is for Japan a sufficiently strong incentive to seek to attain a position in international trade which will give her an option on the surplus supplies of foodstuffs existing elsewhere in the world. Moreover, apart from fears of actual shortage, the fact remains that the possibility of any rise in the Japanese standard of life depends upon the expansion of her foreign markets.

## CHAPTER III

### JAPAN'S INDUSTRIAL FUTURE

THE future of Japan's industrial development is so greatly conditioned by the state of international economic and political relationships that conclusions are inevitably affected by the view that is held about the kind of world that will emerge from the present ill-regulated state of international relations. Yet without some assumption of the future trend of economic policy and development in the world as a whole it is impossible to pass any judgment on the industrial prospects of Japan, depending as they do not merely on internal conditions but on the whole environment. The assumptions on which the conclusions expressed in this chapter will be based are, first, that the present international strife in the Far East will not continue indefinitely and, secondly, that economic nationalism in the world as a whole will not gain in potency, and that there will be at least no serious retrogression in monetary stability and general economic progress. Clearly the first assumption must be made if speculation about the economic future of Japan is to have any value at all, and even if an early termination of the conflict is accepted as a premiss it must be remembered that the conditions upon which peace is restored will largely determine the future of Japan's market in China and also shape her future financial commitments on the Asiatic mainland, upon which so much of her economic development depends. The second assumption, namely that economic conditions in the world as a whole will not go from bad to worse, is obviously one which at the present day must precede any prognostication of a nation's industrial future. In view of all the prevailing uncertainties the reader must, at the outset, be warned of the tentative and provisional nature of whatever conclusions are reached in the present chapter.

We may start by pointing to the fact that the more immediate future of Japan is overshadowed by monetary

problems. The present financial situation and the dangers inherent in it have already been described. Some observers even before the outbreak of war detected a state of disguised inflation, which they considered might become open inflation, and it seems far from impossible that the boom in certain manufacturing industries—itsself the result of an inflationary policy—may be abruptly checked by a financial crisis such as occurred in 1927. If we are taking a short view, this aspect of the Japanese economic problem is of great importance, but it need not occupy space in a study of probable industrial development over a protracted period. Serious as they are, the purely financial troubles of the country, short of a collapse involving the whole national structure, are not likely—to judge by other examples—to impede for more than a comparatively short time the growth of economic power in Japan.

We will begin then by considering the fundamental influences that have been operating during the last two or three decades, and attempt to estimate their importance for Japanese industry in the future. Two factors which will certainly retain their influence in the next ten or twenty years are, first, the rapid growth of population, and secondly the shortage both of land for agricultural development and of industrial raw materials. Although the population problem and the situation regarding raw materials have already received fairly detailed attention in the preceding chapter, it is necessary to consider them again in special relation to the attempt now to be made to follow out the lines along which industry in Japan may be expected to develop.

Japan is still passing through the stage of rapidly increasing population that has been associated everywhere with the introduction of modern industrialism. As with other countries, this phase is likely to be temporary, and already the corrected birth-rate is falling. But for the next fifteen years—and this is a fact of outstanding importance—estimates place the annual addition to population in the neighbourhood of 600,000,<sup>1</sup> and, according to recent

<sup>1</sup> Population of Japan in 1935, 69 millions; estimated population in



expert calculation, at least 400,000 to 450,000 persons will be added annually throughout this period to the number of Japanese for whom employment will have to be provided.<sup>1</sup> This alone must affect greatly the composition and structure of Japan's economic system. Whereas in the West the slowing-down of the rate of increase of the population is causing a relative decline in the industries producing the necessities of life, Japan will have to move in the other direction and develop the trades producing these necessities to provide for her increasing numbers. Thus we may expect a continued expansion of the staple trades working for the home market, the more so because, owing to the very special nature of many Japanese everyday requirements (e.g. the type of cotton, silk, and rayon materials required for Japanese dress), the industries producing them are, and should remain, relatively immune from the competition of cheap imported substitutes.<sup>2</sup> It must be realized, in this connexion, that the size of Japan's industrial labour force available for overseas competition may find itself in time materially limited by this fact. To-day, of her 5.8 million industrial workers of all kinds, more than half are in small workshops employing fewer than five persons, and mostly producing only for the home market.

As regards those of the staple industries which are concerned with the production of raw materials (with the exception perhaps of timber), these cannot be greatly extended without an expenditure of effort disproportionate to results because of the limitation of Japan's physical resources. The position in regard to future supplies of foodstuffs and raw materials was examined in the previous chapter, and it has been shown that, although in the case of foodstuffs Japan's territories overseas may be able to

1950, 78 millions. This is Professor Uyeda's estimate. For a comparison of the various estimates see Ishii, *op. cit.*

<sup>1</sup> Ishii, *op. cit.*

<sup>2</sup> This applies, though in a lesser degree, to rice production, since the Japanese find foreign rice unpalatable and have a strong preference for their own.



cover the growing gap between production and consumption in Japan—though this is by no means certain—she is dependent on foreign countries to supply her increased requirements of industrial raw materials: cotton and other tropical or semi-tropical products, iron ore, and coking coal, as well as the products of animal husbandry such as wool and leather. Consequently, to supply her growing domestic needs she will have also to increase her imports of certain necessities. Thus we have been unable to escape the conclusion that if Japan is to increase, or even to maintain, her standard of life, she must direct an ever larger proportion of her energies towards manufacturing industry in order both to keep up with the requirements of an increasing population and to furnish finished products for exchange on reasonable terms with raw materials of other lands.

Looking at things from the Japanese standpoint, this situation, provided always that restrictions on international trade are not intensified, need not be regarded with alarm. In the first place it should be observed that Japan comes on the market for increasing quantities of raw materials at a time when their prices, in relation to the prices of manufactured goods, are recovering from an exceedingly low level. Since the War the terms of trade between raw-material-producing and manufacturing communities have till recently moved in favour of the latter, a change caused partly by technical advances in the raw-material industries, and partly by the fact that the absorption by Western peoples of many classes of raw products has increased very slowly owing to the fall in the rate of increase of their populations. If these influences continue to operate, even in a much moderated degree, Japan at a time when she needs to make substantial increases in her imports of raw materials should be able to secure them at prices which will not be too excessive.<sup>1</sup>

<sup>1</sup> This paragraph, as written in 1935, has been allowed to remain in a modified form. At the present time—April 1938—it requires, of course, considerable qualification. Indeed, the conclusion reached two years ago may be stultified altogether by the new trend in raw-com-

In any case, in order to import at all, Japan must export, and her problem will be to find markets for an increased volume of exports at prices which will not spell a deterioration of the conditions of her workers. To judge the likelihood of her succeeding in this and to attempt to foresee which types of industry she is most likely to develop are the tasks now before us.

We have already seen that Japan's industrial output underwent a great expansion between the time of the Great War and the beginning of the world depression in 1929.<sup>1</sup> It must be remembered, of course, that a given increase in the quantity of production has a very different significance in a country where population is growing fast from what it has in a country where the rate of growth is slower or where numbers are stationary, and we have to allow for the fact that in Japan the population rose from 52 millions in 1914 to 70 millions in 1936. Nevertheless, though population increased thus swiftly, it is not open to serious doubt that production increased faster than population (there is support for this conclusion in the fact that real wages advanced considerably after this period,<sup>2</sup> an advance which was certainly not due to any tendency to capital consumption). We may, therefore, say that prior to the abnormal conditions brought about by the world crisis, Japan was in the fullest sense a developing country as regards industrial production.

modity prices. How this affects Japan can be seen by the following index figures.

In August 1937 the yen price-levels of Japan's chief imports (1931 = 100) were:

Cotton . . . 302	Rubber . . . 713	Pig-iron . . . 260
Petrol . . . 161	Tin . . . 423	

In 1936, in order to obtain a volume of imports greater than in 1931 by some 25 per cent., Japan had to provide a volume of exports greater by almost 100 per cent.

<sup>1</sup> The statistical tables in the *Japan Year Book* and, for the period before 1931, in Moulton's *Japan* are convenient sources to consult for information about the increase in the output of the leading trades.

<sup>2</sup> See article by Dr. Ayusawa in the *International Labour Review*, Feb.-April 1929; and I.L.O., *Industrial Labour in Japan*, pp. 192 et seq.

The majority of industries shared in this expansion, but we are here mainly concerned with the goods that enter into international trade. It has been shown earlier that industrial growth during this period, and especially the rise of the export trade, was associated mainly with textiles, in particular, cotton goods and raw silk. Up to the world depression, indeed, the additional imports required for the growing population were obtained in exchange for a very limited range of exports sent to a few great markets. In 1928-9 three categories of goods alone, cotton goods, raw silk, and manufactured silk, made up two-thirds of the total exports (compared with 55 per cent. in 1913) and no other single commodity accounted for as much as 2 per cent. of the trade. Thus between 1913 and 1929 the expansion of Japan's foreign trade was increasingly due to two staple commodities sold in a narrow range of markets—the United States, China, and India. During recent years a marked change has occurred. The recovery of exports that began in 1932 was associated with an increase in the range of goods, a rise in the importance of manufactured, as distinct from semi-manufactured, products (such as raw silk), and an increased dispersion of markets. At first these changes were due chiefly to the large fall in the value of silk exports. Later, however, they were the result of the success achieved by Japanese cotton goods, artificial silk, and a large number of minor manufactures in opening new foreign markets (e.g. the Netherlands Indies) or in competing with Western products. With the rise of tariffs and also with a growth of prosperity in many markets, which brought a demand for higher-quality goods, the rapid progress of Japanese exports has (for the moment, it is true) subsided.

The question now arises as to which of these two trends—the pre-depression trend of a limited range of export manufactures sold in a small number of markets, or the recent trend of greater variety of products sold over a greater area—is likely to show itself in the future. This question is of great practical importance for Western

nations, for Japan's great staple, raw silk, which was formerly the chief export, has yielded pride of place since the depression and is not directly competitive with the goods of the leading manufacturing countries, whereas many of the articles of export which had begun to rival it in importance are highly competitive. An answer to the question involves a judgement concerning both the conditions governing the pre-depression trend in Japan and those responsible for the recent changes. The huge increase in raw-silk exports before 1929 was, as already mentioned, intimately connected with American post-war 'prosperity', and the heavy fall in this trade between then and 1934 was due to the intensity of the slump in the United States. Now it is recognized that the long period of booming trade in America was, in part at any rate, the product of inflationary conditions of an exceptional character, conditions that are not likely to be repeated, or, if they do recur, are unlikely to be maintained for more than a short period. Since 1934 the value of silk exports has risen sharply, but it is certainly improbable that the near future will see a growth of American incomes available for expenditure on luxury consumption goods as rapid as the rise which took place in the post-war decade. In view of this situation and in consideration also of the possibility that rayon may to some extent replace silk materials, Japan cannot regard the steep increase in the demand for raw silk between 1919 and 1929 as a normal growth liable to be resumed during the next ten or fifteen years, and it seems reasonable to forecast that silk exports are unlikely to reach the value that they attained in Japan's foreign trade before 1929 although in volume they have almost reached the level of that year.

Cotton exports rose less rapidly than silk exports in the pre-depression period both in quantity and value, but since then they have shown a great capacity for expansion; after a sharp decline in 1930-1 they recovered, and the quantity exported in 1932 and 1933 was substantially greater than in 1929. By 1934 the quantity had risen by 45 per cent. above the 1929 level. The value of these

exports, however, even if we make no allowance for the heavy fall in the exchange value of the yen, was little greater in 1934 than before the depression. It was only by offering these goods at drastically reduced prices that Japan was able to effect the recent increases in sales. From 1934 to 1936 the value of Japan's exports of cotton textiles actually fell; during the first half of 1937 it rose somewhat owing to a rise in prices reflecting the increased cost of raw materials. The trade, consequently, has steadily become less profitable since 1934. Low export prices have been made possible by the exceptional and temporary circumstances which produced the Japanese industrial boom after 1932, namely, the deflation of costs in 1930-1, when Japan was on the gold standard,<sup>1</sup> followed by the heavy depreciation of the exchange in the subsequent inflationary period, when, owing to the continued depression abroad, she was still able to buy raw materials at low prices. The continued depression in Japanese rural districts also provided her with increased labour supplies at low wages. This combination of advantages steadily grew less after 1934, as has been pointed out already, and Japanese cotton exporters were in 1937 facing a difficult future untempered by such assistance.

Let us look at these difficulties as they present themselves to the cotton-goods exporter. During the depression period the total international trade in these goods was practically stationary, chiefly owing to the growth of the

<sup>1</sup> The substantial reductions effected in labour costs in certain exporting industries is indicated by the fact that between 1928 and 1933 average daily wages were reduced by 27 per cent. in weaving, and this was more or less typical of women's wages in the textile industries. The fall in the general index of money wage-rates continued down to the end of 1936 in spite of the rise in the cost of living after 1931. The fall in certain industries, producing mainly for the home market (e.g. in printing and paper, metals and manufactured food), was not nearly as great as in the exporting trades. As in all countries, real wages in industry as a whole rose slightly during the first year of depression (1930-1), owing to the fall in the cost of living. These were years in which Japanese industry was very depressed. Since then the index of real wages has fallen by some 10 per cent., but the fall in the exporting trades has been much greater than this. Uyeda and Inokuchi, *Cost of Living and Real Wages in Japan, 1914-36*.

industry in countries hitherto the chief importers of cottons. It is unlikely that the tendency towards self-sufficiency in the manufacture of cotton goods will be reversed in the next ten years, having in view the probable growth of the industry in China, India, and elsewhere. Economic policy is fostering this tendency. Of late years, import duties have been considerably increased in what were previously low-tariff countries, while fiscal protection has been strengthened in Japan's chief markets since the Japan-India Agreement of January 1934 and in the Netherlands East Indies from the end of that year. In the last few years tariff wars have occurred between Japan and Canada and Australia. To-day most countries have placed restrictions on Japanese goods. Japan may contrive to find new outlets for her cotton wares, as she has done in the East Indies and in Africa, where she has tapped new levels of demand among customers who could not previously afford to buy imported goods, but the maintenance of these markets is likely to depend on Japan's being able to continue to offer the goods at the present exceptionally low prices. Moreover, in such of these markets as are under the control of European Governments she has to face restrictions, and in many cases discrimination, against her imports. It was natural, therefore, that the recent advance in the cotton export trade began to slow up in 1934 until in 1936-7 it ceased altogether.

Having regard to these conditions, there is considerable reason to expect that the staple trades—cotton and silk—will contribute less to the development of the Japanese export trade during the next ten years than they have in the past unless, of course, the Chinese market can be intensively developed and the United States can restore and maintain her prosperity. What are the prospects of Japan developing in their place other classes of exports? Since 1929 a large number of minor manufactures have, as we saw in the previous chapter, taken a prominent place, and even during the first two years of the depression, when Japanese foreign trade slumped badly, several

of these exports continued to grow.<sup>1</sup> This would suggest that these new lines of development owe less than the staple trades to the present monetary and financial conditions. The remarkable expansion shown by the artificial-silk trade has already been described. Import restrictions on Japanese cotton goods may account for some part of this growth, but it also arises from an increased demand for rayon fabrics on the part of Asiatic consumers. There seems no reason why Japan should not capture an increasingly large share of this new demand. Raw materials are not expensive and are partially produced in Japan. The nature of the industry, in which organizing ability and manipulative skill are both important, should accord well with Japanese aptitudes, and cotton manufacturers are likely to transfer their activities to an increasing extent from cotton to artificial-silk weaving. To a less degree an expansion may come about in the woollen and worsted industry, particularly the hosiery branch, especially since the adoption of Western dress fashions by oriental consumers—not least in Japan itself—may be expected to assist the Japanese manufacturer. Much—if not most—of the probable increase in these products will not, however, directly compete with the British woollen industry, inasmuch as it will provide even in Western markets for a new demand made possible by the cheapness of the products. The recent developments which we have described as taking place in the field of small-scale enterprise would in spite of recent checks point also to the continued growth of exports of cheap rubber goods, tinned fish, pottery, the simpler electrical appliances, and the wide range of other light manufactured articles which populations in process of raising themselves from primitive

<sup>1</sup> To illustrate the expansion of the 'miscellaneous' export trade at the height of the 'exchange' boom it may be mentioned that an examination of export statistics for the first four months of 1934 shows that 100 per cent., or higher, increases over the corresponding period of 1933 occurred in the following articles, among others: rayon, coal-tar dye-stuffs, electrical appliances, woollen fabrics, linen tissues. These exports (apart from rayon) have, however, not increased unduly since then, and the rayon exports have only been maintained in conjunction with a halving of their price.



economic conditions and traditional standards of consumption are likely to require, but are unable, in their present stage of development, to produce economically for themselves. The success of Japan in building up a substantial trade in these commodities will depend greatly on the economic progress of other Asiatic peoples.

The metallurgical industries, on the other hand—at any rate the branches concerned with primary and semi-manufactured products—offer less scope for Japanese export enterprise. Here, as we have seen, the lack of ore and coking coal is a serious handicap. It does not seem that the Manchurian supplies of iron ore are destined to fill the gap, for these are of low quality, and even if extensively exploited are likely to be smelted on the spot. Japan has already been forced to go far afield for her ore supplies, to the Yangtze valley, to British Malaya, and to Australia. It therefore seems highly improbable that Japan will be able to develop a substantial production of pig-iron without additional Government subsidies and heavy protection. Circumstances, then, are clearly unfavourable to the building up of an important export trade on a permanent basis.

The steel industry also is handicapped by the high cost of fuel and by the necessity of importing much of the other materials required. The difficulties in the way of pig-iron production prevent the extensive adoption of the cheap Bessemer process of conversion and of the 'continuous method'. The bulk of Japanese steel is made from cold metal in open-hearth furnaces, and a very large proportion (over 50 per cent.) of the typical charge consists of scrap-iron, when it can be obtained at low prices. The ability to produce steel cheaply is thus bound up with the possibility at any given time of obtaining scrap at low prices. In periods of general depression and rapid obsolescence, scrap is always low in price; but with the recent rise in world production the price of scrap has risen steeply, as it did also in the 1928-9 boom. This has added greatly to the cost of conversion in the Japanese steel industry. As shown in Chapter II, during the last



few years the iron and steel output has doubled, but the increase is attributable mainly to heavy Government expenditure on munitions and constructional work and to Manchurian development. Without the financial support of the Government, aided in years of low prices abroad by import duties, Japan's iron and steel industry would certainly be much smaller than it is. For these reasons Japan seems hardly likely to become a serious competitor either in crude iron and steel or in finished products of the heavier types at least, such as rails, though there is less certainty in the case of lighter articles such as tubes, bars, and hoops. The possible effects of the development of North China as a source of supply of materials and as a market for finished products introduces, however, an incalculable factor which may alter the balance of forces.

High material costs present a permanent obstacle to the growth of trade in *heavy* engineering products. A further temporary barrier to this trade is to be found in Japan's lack of highly skilled engineering labour. Japan learns quickly, but some time is likely to elapse before she can compete with the older industrial countries in this respect. Complicated engineering products, which must satisfy high standards of performance and safety, make greater demands on the skill of labour than do textiles, and countries in the earlier stages of modern industrial evolution are likely to lag behind in their development. This applies very much less in the field of light engineering and light metal goods, where standards of performance are less exacting, where difficulties resolve themselves into problems of organization, where material costs form a small proportion of price, and where the inherited dexterity of the average Japanese can be used to the full. In this sphere Japan is already making headway in foreign markets, and she may reasonably expect to be able to extend her exports of these goods.

Our conclusions up to this point may, then, be summed up as follows. If Japan is to raise the living standards of her rapidly growing population she must expand her industries and export trade. Her capacity for industrial

development is undoubted, being proved by her past record. Hitherto, however, her export trade has mainly rested on two staple products and on a limited field of markets. One of these staples, the silk trade, is stationary at present and has poor hopes of substantial expansion. The other, the cotton trade, has greatly expanded, but is now having to face a number of adverse influences, such as home production in some of the chief markets, and high tariffs with other symptoms of 'economic nationalism' throughout world markets as a whole. It appears that if Japan is to carry on her success in the cotton trade, whether reckoned absolutely by the bulk and value of her exports, or relatively by the share she obtains of an international trade which may, as a whole, be dwindling, it can only be by maintaining the advantage of very low selling prices and by the improvement of demand in the main markets, particularly in poverty-stricken China. Finally, the uncertainties of the silk trade and the slowing down of the demand for cotton goods have already resulted in Japan's 'swing-over' to the export of other classes of manufactures.

From these conclusions it follows that, in so far as competition with British exports is concerned, the field is likely to widen, and that over a number of years an increasing number of industries in Great Britain which are producing low-priced or low-quality goods are liable to feel the effects of competition with Japan. The fact was stressed in the first part of this book that Japanese competition owes its present effectiveness more to the character of Japanese goods than to the volume of sales, and, most of all, to the factor of price. It is therefore essential to gauge how much Japan's advantage in the cheap production of goods is capable of applying to a wider range of production and how permanent it will prove. To this question we will now turn our attention. Reasons have been given for believing that the adventitious aids in the form of 'exchange bonus' and other benefits derived from the depreciation of the yen—important though they have been—have by now lost the greater

part of their force. Therefore, the question we have to consider is whether normal costs of production are likely to stay at the present levels or to tend to mount to the level of costs in Great Britain and other industrial countries of the West. The principal factors which determine levels of costs have already been touched upon. Among these there is one which has attracted particular attention by the contrast revealed between conditions in East and West, namely, the cost of labour. To the question of industrial labour we will now therefore revert and attempt to draw some conclusions from the facts in the previous section as to the answer to be given to the question so often asked, 'Will Japanese wages stay low or will they, under the influence of natural economic forces, tend to rise to the level of those of the Western worker?'

In the discussion of this question the social background is vitally important. Thus, when we come to consider the basis of the Japanese wage structure, it is essential to remember that slightly less than half the working population of the country (actually 48 per cent.; 42 per cent. of the men and 60 per cent. of the women) still gains its livelihood mainly from agriculture, whereas the numbers engaged in her manufacturing industries large and small, traditional and modern, are comparatively restricted (20 per cent.). Notwithstanding the commanding position to which these industries have attained, Japan remains, therefore, primarily a peasant and agrarian State. Although a distinctive urban proletariat seems gradually to be emerging, the national standard of living depends largely upon economic conditions in rural areas. Apart from the heavy industries and engineering, the newer industries in Japan do not demand a substantially greater degree of skill than that already possessed by the quite skilful rural worker, male or female. Consequently the surplus population of the villages can readily be used in industry, and while the prices of rice and of silk cocoons remain at a low level this leads to the acceptance of low wages by the peasants for work in the towns.

To render more intelligible the interconnexion between

agricultural earnings and industrial wages it is necessary to describe briefly the recent position of the Japanese farmer and the peculiar difficulties with which he has been faced, at the same time showing how these factors have reacted upon the industrial labour market and on the cost of living.

In Japan industry and agriculture stand in marked contrast to one another, for whereas the former has to a considerable degree incorporated, and here and there even improved upon, Western technique, the latter very largely retains its traditional character. Farming is mainly dependent on a complex form of irrigated rice cultivation and silk-worm rearing, which in some regions, and particularly among tenant farmers, is accompanied by gross poverty, overcrowding of the land, and debt. Many farmers even in times of comparative prosperity have scarcely any margin of income above the barest subsistence level, and thus have scarcely any reserves upon which to fall back in the day of adversity.<sup>1</sup> Owing to this overwhelming dependence upon rice and raw silk, the least economic disturbance affecting the prices of these commodities easily brings numerous villages to the verge of starvation or default on their debts. There was a very marked decline in prices between 1929 and 1933 (that of raw silk having fallen in 1933 by over 60 per cent. and that of rice by about 33 per cent.). The position of the Japanese farmer was consequently for a time a desperate one, and the youth among the rural population gravitated towards the cities and the factories in the hope of finding better conditions there.

<sup>1</sup> 'The Bureau of Agriculture has conducted annual investigations since 1921 in farmers' economy, and has found that in the year 1929 there was a deficit, in 32.2 per cent. of the 1,475 households studied' (Ishii, op. cit., p. 145). 'The balance sheet of the average farmer (after allowing for income on subsidiary business and *after deducting household expenses*) shows an annual surplus of only 75.90 yen or 6.325 yen per month' (p. 146). Thus in ordinary years the farmer can live and save a few pounds, but in depression very quickly gets into debt. It is necessary, however, to add the warning that there has been a certain tendency among recent writers on economic conditions in Japan to paint the impoverished state of the peasantry in too strong colours.

But this was only an intensified instance of a long-established phenomenon. In the words of Professor Uyeda:

'This population movement is not a feature limited to the latest years, but was one experienced when all previous censuses were taken. Every year, thousands of boys and girls born and brought up in villages leave their homes, and go to cities and towns, seeking employment in trade, industry, and domestic services.'<sup>1</sup>

Mr. Ishii produces figures showing

'the highly interesting fact that while the total population of Japan increased to the extent of almost 17.7 millions during the period from 1893 to 1925, the rural districts absorbed only slightly more than 2.5 millions or 14 per cent. of the increase, in contrast to the urban communities (places with 10,000 inhabitants and over) which absorbed the remaining 15 millions, or 86 per cent. Moreover, the greater portion of the rural gain was made during the first five years from 1893 to 1898.'<sup>1</sup>

Between 1930 and 1935 the urban districts of Tokyo, Yokohama, Osaka, Kobe, Kyoto, Nagasaki, and Fukuoka showed an increase of population equal to 60 per cent. of that of the whole country.<sup>1</sup> This floating supply of labour has tended, until very recently, to outrun the demands of industry and consequently to depress wage-levels. To quote Professor Uyeda once more, on the general subject of the town worker's standard of living:

'On the whole the standard of living of industrial workers, after having been raised substantially after the War, has not made any progress since that time, and to-day [1936] the position is not as good as that in 1924.'<sup>2</sup>

The same investigator's studies show that the changes in the real wages of industrial workers have been very unevenly spread between various industries and between the sexes of the workers themselves. In cotton-spinning and silk-reeling, real wages, which were fairly stationary

<sup>1</sup> Uyeda, *The Growth of Population and Occupational Changes*, Japanese Council, I.P.R., 1936, p. 8., and Ishii, *Population Pressure and Economic Life in Japan*, p. 72.

<sup>2</sup> Uyeda and Inokuchi, *Cost of Living and Real Wages in Japan, 1914-36*, p. 17.

between 1926 and 1930, fell sharply later, until in 1933 they were only 80 per cent. of the previous level. Since then they have recovered slightly. Other textile wages also fell, though not so sharply.

'One explanation for the fact that cotton operatives' money wages do not rise with the rise in the cost of living is that these female workers live in dormitories attached to the factories; all of their housing and a part of their food expenses are met by their employers. It is, therefore, only a rise in the cost of other necessities and comforts which affects their living conditions. When, however, girls as a usual practice send a part of their wages to their parents or relations in the country, changes in the purchasing power of money, just to that extent, affect the life of those people more strongly.'<sup>1</sup>

Men's real wages were rising steadily in most industries up to 1931. From then to 1933 one group of industries showed a fairly heavy fall, while the others showed a rapid rise. The falling group consisted of chemicals, paper, pottery, rubber manufacture, book-binding, dyeing, timber and furniture manufacture, food and drink manufacture, industries not affected directly by expenditure financed through Government bonds. On the other hand, the heavy metal and engineering industries showed a large rise. From 1933 to 1936 we have no prepared tables but the level of real wages seemed to have become more stable.

Thus, writing in the middle of 1936, Professors Uyeda and Inokuchi say that in spite of

'the growth of industrial production during the past few years, most of the two million factory workers, apart from the minority employed in heavy industries, are still reaping little of the harvest of the "boom". The authors' connection with this and other studies leads them to the conclusion that the rapidly growing population, and especially that section belonging to productive ages (15-59) is of considerable importance in any explanation, though there are other influences of at least equal strength at work.'<sup>2</sup>

One might hazard the opinion that these 'other influences' included both foreign tariffs and the deliberate distortion of the productive mechanism for 'defence ends'.

<sup>1</sup> Op. cit., p. 20.

<sup>2</sup> Op. cit., p. 21.

The ill fortunes of the farmer, to which we referred above, have been the good fortune of the industrialists producing goods for export or in response to the rapidly increasing Government demand. From 1930 to 1934, at a time when factory mechanization was steadily reducing the amount of skill required in the performance of various industrial processes, rural depression had been the means of lowering substantially the cost of unskilled and semi-skilled labour.

In view of the nexus which thus exists between farm earnings and industrial wages, it might be argued that if agricultural prices are ultimately raised as a result of Government measures, such as those now being undertaken with a view to the control and stabilization of rice production, the consequent rise in the cost of living for townsmen must sooner or later force up wages as well. The process of forcing up wages usually implies, however, determination and ability on the part of the worker to exert pressure on the employer. How does the Japanese worker stand in regard to this? In the first place, so long as he or she remains as closely linked as at present to rural life, revolt against conditions in the cities, which, however hard, will still tend to compare favourably with those on the farm, is less likely to develop to an effective pitch. The agricultural standard in Japan is bound, in present circumstances, to act thus as a drag upon industrial wages until the demand for labour is permanently raised to a high degree. A still more effective check on the future power of the industrial workers to effect a rise in wages lies in the possibility of an over-abundance of labour supply for a number of years to come. This will only be avoided if the present increase in investment, which is Government-inspired, can continue for some time or be replaced by private investment.

It has already been mentioned that over the next decade or so some 400,000 to 450,000 persons will be added each year to the working-class population of Japan for whom, by Professor Ishii's calculations, employment will have to be found, and that owing to land shortage, agriculture



will be able to absorb only a very small fraction of this annual increment, so that in the absence of an alternative outlet in the form of emigration, the majority, as they reach maturity, will tend to enter the commercial or industrial labour market. The next ten or fifteen years may therefore witness the emergence of a distinctive industrial proletariat, consisting of persons who must rely upon factory employment as the sole source of their livelihood; but until this growing body of workers can develop sufficient solidarity to give weight to any claim they may make for better conditions—and we have seen elsewhere that in Japan organized labour is scarcely within sight of being the social force which it has become in the West—the raising of wages through collective bargaining will be impossible.

It may, of course, be contended that the further expansion of Japanese industry must create new demands for labour and so eventually restore the relative equilibrium as between industry and agriculture which existed up to 1929. Support for this view appears at first sight to be forthcoming from the conclusions reached earlier in this chapter regarding the future of Japanese export trade, for although the opinion was expressed that the cotton industry had for the time being at least reached a point beyond which further progress would be difficult, many branches of light manufacture were judged capable of being greatly extended. Having regard, however, to the spread of mechanization as a permanent factor in industrial development, it would not be safe to assume that labour requirements will grow *pari passu* with the growth of industrial output. Technological unemployment, unnecessary as it may be in a well-organized economic community, is a phenomenon known to almost every industrial country and not least to Japan. In fact, for a few years recently the very perfecting of technique threatened to deprive her of one of the most hoped-for fruits of industrialization, namely an increased opportunity of livelihood for those of her population whom agriculture can no longer support.

As regards this effect of mechanization we may quote



one or two significant facts. In the cotton industry the daily average of spindles in operation increased between 1927 and 1935 from 4.8 millions to 10.4 millions. The number of operatives had not increased.<sup>1</sup> Even more striking are the figures of operatives per 1,000 looms owned by the spinning companies, which fell from 792 to 451. The broad trend can best be illustrated by figures derived from estimates made by the Mitsubishi Economic Research Bureau and by Professor Uyeda. These show that, while between 1920 and 1930 the proportion of the Japanese occupied population engaged in manufactures remained almost stationary, the general index of industrial production (based on the 1921-5 average) rose between 1924 and 1930 by 39 per cent. It might reasonably be concluded that the great expansion of manufacturing activity which has taken place in Japan since the War has brought with it a less than proportionate increase in employment. We may presume that, while fresh demands for labour will certainly arise, more especially as a result of the establishment of new industries, the reduction of Japan's present labour surplus to normal proportions would call for a far greater expansion both of commerce and of industry than would appear possible in the near future, at all events without some form of national planning.<sup>2</sup> If such planning is impossible to achieve, or maintain, the Japanese manufacturer may justifiably look for conditions in which he will continue to pay low money-wages.

It has been repeatedly emphasized in earlier parts of this book that in looking for the causes of the lowness of Japanese manufacturing costs, at least as much attention must be paid to efficiency as to the wage-level. In continuing our inquiry into the chances of manufacturing costs remaining abnormally low judged by Western

<sup>1</sup> *Japan Year Book*.

<sup>2</sup> To show how Government action can operate to offset such tendencies it may be mentioned that employment increased by 18 per cent. between Jan. 1936 and June 1937, largely as the result of the expenditure of the proceeds of Government bond issues.

standards, we must therefore examine the outlook in this regard. Japan has proved her ability to manufacture and sell at low prices a wide variety of articles, but despite the excellent design to be observed in her traditional types of goods and the industrial progress made in recent years, many of her manufactured products are still of poor quality. The fact that Japanese cotton-spinners are turning their attention to spinning finer counts of yarn than heretofore is, therefore, not without its significance for the future as suggesting that in numerous branches of manufacture technical resources will henceforth be directed more towards securing qualitative improvements than to fresh savings in production costs. In all such efforts to improve the reputation of Japanese goods the Government is actively interested, as was shown as long ago as 1924 by the establishment of Government inspection stations in connexion with the raw-silk trade. The Export Guilds Law of 1925 had in some degree a similar object, but a more general realization of the importance of raising quality, if Japan is to consolidate her position in world markets, is only now beginning to dawn. Under official leadership, however, efforts are being made to remedy defects in economic organization wherever possible, some of which will almost certainly lead to success. In several directions there is likelihood of a further improvement in efficiency which, irrespective of the future trend of wages or of attempts to raise quality, must enhance competitive power by reducing costs of production. In the cotton textile industry, it is true, efficiency and organization have already reached a level where scope for improvement except in the direction of quality must necessarily be limited. Were wages to increase, the countervailing effects of an increase in efficiency could, therefore, in all probability not be counted on to prevent a rise in production costs as far as this particular industry is concerned.

Observation of Japanese internal conditions prior to the outbreak of the present hostilities led us to conclude that this increase in wages would not soon take place. The supply of labour seeking employment under those

conditions continued to outrun demand, thereby acting as a drag upon wages, while the economic and social link between farmers and factory workers tended to limit the margin of difference between their respective earnings. An increase in workers' cost of living might, it is true, have had the effect of arresting the current downward trend of industrial wages, or at least of keeping them from falling further. A movement in this direction depended primarily upon the extent to which the Government was prepared to raise the prices of food artificially in order to improve the condition of the peasants. It would appear, therefore, that a strong policy of agrarian relief might easily run counter to the interests of Japanese manufacturers concerned with the export trade, while on the other hand return to the agrarian conditions of 1932-4 would threaten disaster to the mass of Japan's rural population.

The discussion of wage-levels has thus led us to the wider field of social and political forces. It is impossible to consider economic trends in isolation from these, and we must now proceed to trace, in a few specific cases, their influence on industry.

In some respects the immaturity of modern industry in Japan and the traditional character of her social system constitute an obstacle to successful competition with other nations, having led, for example, to shortage of capital and lack of highly skilled labour of certain types. In other respects immaturity is a potential advantage. The position in Japan regarding industrial relations is an instance of this. Relations between labour and capital have been shown to be different in kind from those of the West, being affected by a group ideology carried over from an earlier era. The weakness of trade unions and paternalism in industry are other survivals. From a purely social point of view there may be strong objections to certain features of Japanese industrial relations. It seems, on the other hand, probable that they endow the Japanese industrial system with a greater power of adjusting itself to changing circumstances than is possessed by the more highly developed industrial systems of Western democracies, where

social and political resistance to the changes required by economic conditions is often very strong. Perhaps in course of time this resilience in Japan will diminish, but for some years to come it is likely to persist. Again, the necessity of providing a greatly increased quantity of capital goods for her growing population will involve national saving on a large scale, which may reduce the proportion of the national income going to wage-earners.

The rapid growth of population is another social force which, while creating the serious problems already referred to, is of advantage in other directions by helping to maintain elasticity in the economic system. In a country with a rapidly increasing population the demand for nearly all classes of commodities, particularly the basic necessities, is likely to expand. Consequently, in so far as concerns the trades producing for the home market, Japan is not likely to be troubled to the same extent as Western countries by the serious problems of labour transference and capital depreciation associated with a situation in which the older staple industries are stationary or declining. The difficulties attaching to transference will, in any case, be mitigated in Japan by the fact that the additional numbers coming on the labour market each year will constitute a relatively high proportion of the total working force. Changes in the relative size of the different industries in response to alternations in demand can, in such circumstances, be effected quickly and without giving rise to a dangerous unemployment problem, merely by shifting the direction of industrial recruitment. Thus the problems of adjustment are not likely to be so acute in Japan during the next twenty years as they are in the West, and the response of her industrial system to changing circumstances both at home and abroad will probably be much greater.

Against this there are things in the social and political situation which tend to retard industrial progress. It has already been indicated, for instance, that industrial development may be adversely affected if the Japanese retain their peculiar tastes and requirements, particularly in

regard to the consumption of rice. Another, and probably more important, drag on industrial advance is liable to occur on account of the resistance offered by vested interests to the adoption of an all-round industrial policy which would threaten their particular sphere.<sup>1</sup> It is clear that if Japan is to expand her foreign trade, she must do so by specializing in those activities in which her relative advantages are greatest. This policy is bound to be hindered if measures are taken for extending or maintaining production in other categories of trade. For example, cheap fuel is, in spite of Japan's vast resources of water-power, an essential condition of her industrial expansion. Yet in the interests of local mines producing at high cost, the price of coal in Japan has in the past been kept up not only by tariffs but also by agreements between the Japanese coal-owners and the South Manchurian Railway designed to limit the import of cheap coal. Many other industries have been bolstered up by protective duties and subsidies, and producers who have suffered severely from overseas competition, such as the agriculturists, have pressed strongly for an extension of this assistance. In a country in which political power is largely exercised through groups, the claims of threatened interests will prove difficult to deny. Resistance has already been offered to competitive imports coming from the Japanese colonies as well as from foreign countries. There is, further, a conflict between political and economic objectives which is likely to hinder the natural course of adjustment. We have seen that although, owing to lack of local supplies of ore and coking coal, Japan has little chance of creating an iron and steel or heavy engineering trade capable of competing in foreign markets, she may well become an important centre for the manufacture of the lighter and simpler metal goods. Clearly this latter development may be checked if the price of imported crude iron and steel is raised by means of tariffs imposed in the interests of the heavier branches of the industry. Yet this is liable to

<sup>1</sup> The effects on national co-operation of the incident of Feb. 26th, 1936, and of the present war must, however, be taken into consideration.

occur because for military reasons Japan will be under a strong inducement to preserve her heavy plants at whatever cost to her economic interests.<sup>1</sup>

This conflict of economic and political motives shows itself in an extreme form over the problem of the livelihood of the peasantry, to which we must now for a moment revert. The Japanese peasant's standard of life rose less than that of the urban workers between 1914 and 1929 and fell more steeply between 1929 and 1932. In some degree the present rural over-population may be traced back to the characteristic immobility of workers in agriculture, but other contributory influences have operated in the past, such as the rise in the present century in the demand for rice and raw silk, the import duties on agricultural products, and the practice of the Government of providing huge sums for valorization schemes in times of depression when the market prices of raw products have fallen very low.<sup>2</sup> This type of official help has certainly impeded the transference of peasants to occupations in which they could probably contribute far more to the national income. Unless the demand for raw silk by the U.S.A. can be maintained the peasants' position will deteriorate, and still further Government assistance will be required to maintain them on the land. Obviously the burden of preserving the peasantry would then fall on the urban workers and industrial capitalists and would, as pointed out already, have the effect of raising manufacturing costs to the detriment of the export trade in finished products.

The purely economic interests of the country would seem to some, therefore, to require a reduction in the strength of the peasantry. But here again economic interests and social and political considerations come into conflict. The army, drawn largely from among the farming classes, has interests in common with them, and, for

<sup>1</sup> Recent developments in the iron and steel and engineering industries are described on pp. 129 et seq., above.

<sup>2</sup> This problem is complicated by the fact that Japanese of all classes still prefer Japanese rice to imported rice in spite of its higher price.

so long as it retains power in Japanese politics, the military element may be expected to favour policies of peasant protection, partly because of a natural anxiety to maintain a large home production of foodstuffs, and partly because any weakening of the peasantry would react on the army's strength. In this connexion it is not without significance that the political groups formed recently among the young officers should have professed themselves bitterly hostile to financiers and industrial capitalists. There exists, meanwhile, still another political motive for 'underpinning' the peasantry. The peasants represent in a sense the repository of the traditions of Old Japan, and offer a powerful resistance to the disintegrating influence that comes from urban and industrial life. The preservation of paternal and semi-feudal relations in industry which is characteristic of Japan has probably been possible only because so many of the urban workers have been drawn from rural families and retain vestiges of their peasant ideology. If the peasantry is weakened, Japan's social and political life must be profoundly modified and the country might conceivably be shaken to its foundations by the changes that would ensue.

The Japanese governing classes are thus faced with a dilemma. If they follow the policy that economic considerations appear to dictate, then they must be prepared to withdraw financial support, not only from certain great manufacturing interests which without this support could not make profits, but from the peasantry also. This would result in a further depression of the rural classes pending the time when the operation of natural laws might re-establish an equilibrium between them and the other classes. Such a policy would provoke political resistance on the part of those affected and might even undermine the basis of the Japanese State as at present constituted and of the old Japanese culture. If, on the other hand, the Government pursues from general political motives a policy of financial support for the peasants, the consequence will be to impede the expansion of the exporting trades and to place additional burdens on the urban



workers, provoking unrest among them.<sup>1</sup> There appears to exist, then, an inherent contradiction in the situation which does not admit of any obvious solution short of a trial of strength. The resilience in Japan's economic system together with the genius for successful compromise possessed by the governing classes, and indeed by the whole people, may possibly postpone the issue and prevent the struggle from taking a violent form. But in the meantime the very existence of this conflict of interests and opposition of forces is likely to prove a brake on balanced industrial expansion and competitive export power.

The reactions of national policy on industrial development are even more clearly apparent in what may be called Japan's 'imperial problems'. Let us consider the part that the Japanese overseas empire and Manchukuo<sup>2</sup> are likely to play in the economic development of the home country. The importance to Japan of Formosa, Korea, and Manchukuo will depend on the extent to which they afford markets for manufactures, fields for profitable investment, and sources of cheap raw materials. If, through Japanese enterprise, the empire and Manchukuo are developed so as to provide the home manufacturers with cheap raw materials and if, as a consequence of this, a reciprocal export of Japanese finished goods grows, then these countries may be of great value in assisting in the industrialization of Japan. Political control can certainly be turned to the benefit of Japanese industries since competitive foreign imports to the colonies can be subjected to import duties, and important customers, such as the colonial Governments, and, in the case of Manchukuo, the South Manchurian Railway, can give preference to Japanese goods in placing their orders. But if, in the pursuance of political objectives, the Japanese Government takes deliberate steps to put a ring round the empire and to make it self-

<sup>1</sup> It may be of interest to point out that this is the modern form of the centuries-old problem of discovering in Japan's controlled economy what should be the price of rice. Tokugawa economic literature contains innumerable discussions on this question.

<sup>2</sup> North and Central China now also come into this problem.



sufficing, this cannot but lead to a misdirection of investment and a less economical distribution and utilization of Japanese resources and so prove economically injurious. This policy of an 'economic bloc' was, as a matter of fact, advocated some years back by some writers and politicians and the 'bloc' is now made to include North China. In support of their arguments, the advocates could point to the large increase that had taken place since the War in the proportion of the trade of Japan proper with her dependencies, and to the recent marked expansion of trade with Manchukuo. But actually less than one-quarter of her exports goes to the colonies, and just over a quarter of her imports comes from them, and there is no probability that the colonies will ever be able to supply their mother-country with such essential raw materials as cotton, iron ore, and wool as cheaply as she can buy them from abroad, or that the colonial markets will prove adequate substitutes for India, China, and the United States. To some extent the Japanese Government has embarked already on this 'un-economic' policy, the growth that has taken place in the relative importance of Japan's empire markets being due in part to differential tariffs and other such politico-economic devices. For example, the growth of the Formosan sugar industry has been fostered by subsidies, special credit facilities, and import duties on foreign sugar, the result of which has been to raise the cost of the commodity to the Japanese consumer. Again, some of the increase in Japan's exports to her colonies, and also to Manchukuo, has been caused by heavy Japanese investment and governmental expenditure in those areas, often undertaken for political rather than economic reasons. It is not suggested that the policy is nationally unwise—economic ends may sometimes be rightly subordinated to political ends—but it must be recognized that deliberate measures to divert the natural course of trade often prevent the most economical distribution of resources, and that this is an important consideration in a country in which the standard of life is still low.

Another conflict of policy disturbing to industrial

evolution arises in connexion with the economic relations between Japan herself and her overseas dependencies, namely whether home or overseas interests are to predominate in cases where competition arises between the two. There are many lines of production in which colonial or Manchukuoan exports may, or do, compete successfully with Japanese products in the home market. The home interests then on occasion appeal for protection to the State. Already imports of Manchukuoan pig-iron and coal have been restricted in the interest of Japanese producers and the Japanese peasants are asking for protection against Korean rice. Conversely, it is possible that Japanese cotton textile exports to Manchukuo may be threatened by the rise of a local cotton-manufacturing industry. Thus, in both home and colonial affairs, we find the Japanese Government placed at the cross-roads and obliged, in choosing the course to take, to do their best to reconcile broad national policy with the dictates of sound economy as well as with pressure exerted by opposing sectional interests, particularly among Japanese merchants and the military.

The weight that will be given in the formation of policy to conflicting aims and interests is bound to depend to no inconsiderable degree on the kind of international environment in which Japan will find herself placed. If in the next few years the trend towards economic nationalism is reversed in the world as a whole and if progress is resumed, then the advantages of forming part of an international economic system will become more pronounced, and the defects of a policy designed to secure a high degree of self-sufficiency within the boundaries of the empire will become more obvious. But if economic nationalism is intensified and political relationships exacerbated, Japan will have less incentive to let slide industries regarded as necessary to her security and a greater incentive to pursue a policy of imperial expansion, the probable result of which would be to create disturbing conditions throughout her economy as a whole. The diplomatic consequences of either eventuality are obviously a matter for the closest

consideration, but lie outside the scope of the present study.

## SUPPLEMENTARY NOTE ON ECONOMIC DEVELOPMENTS IN JAPANESE INDUSTRIALIZA- TION, 1935-7

The section of the book which deals with Japan has, as stated in the Preface, been brought as far as possible up to date. There remain, however, certain data and observations relating to the last two years which may usefully be included in an addendum.

### *Industrial Production.*

The following is a table showing movements in the output of leading industrial products which does not, however, include the output of numerous classes of domestic Japanese goods entering largely into the daily lives of the people.

INDUSTRIAL PRODUCTION  
(Based on Mitsubishi indexes of *quantity*)

	1930	1935	1936	<i>Up till outbreak of war, 1937</i>
General index (26 articles) . . . . .	100	150	161	180
Mining . . . . .	100	118	132	142
Cotton piece-goods . . . . .	100	133	130	136
Rayon piece-goods . . . . .	100	421	658	831
Woollen yarn . . . . .	100	173	171	176
Paper . . . . .	100	126	142	156
Pig-iron . . . . .	100	164	173	195
Steel products . . . . .	100	201	239	283
Railway traffic (excluding Government service) . . . . .	100	120	129	141

For chemicals there was, over the period, a very heavy increase in soda ash, caustic soda, bleaching powder, superphosphate of lime, ammonium sulphate, and sulphur.

It will be seen that, in spite of all difficulties, Japan's industrial progress has been proceeding at a rapid pace. It is clear, however, that this progress has departed from the established lines. In the first place, the increased output is not mainly for use by the ordinary Japanese consumer. Undoubtedly some rise in the production of

consumption goods has occurred, but in a much less degree than in the case of capital goods. The progress has been made by the expenditure of vast sums representing the proceeds of bond issues and by the determination of the industrialists to invest their profits mainly in building up greater industrial self-sufficiency in Japan, particularly in war-time essentials.

### *Foreign Trade.*

The *volume* (value divided by the price per unit sold) and *value* of the Japanese exports have moved as follows:

		<i>Index of volume</i> (1928 = 100)	<i>Increase</i> <i>over</i> <i>previous</i> <i>year</i>	<i>Index of value</i> (1928 = 100)	<i>Increase</i> <i>over</i> <i>previous</i> <i>year</i>
1928 . . .		100	..	100	..
1929 . . .		111	11	109	9
1930 . . .		103	-8	75	-34
1931 . . .		106	3	58	-17
1932 . . .		125	19	72	14
1933 . . .		138	13	94	22
1934 . . .		163	25	110	16
1935 . . .		185	22	127	17
1936 . . .		203	18	137	10
1937 (11 months)		212	9	162	25

This table shows firstly that while Japan's exports (in terms of a heavily depreciated yen) were in 1936 worth 37 per cent. more than in 1928, to attain this result it had been necessary to more than double their volume, secondly that the year of most rapid increase in *volume* was 1933-4 (after that date the rate of increase began to slow down in spite of the general improvement in international trade conditions), and thirdly that the slowing down in the rate of *volume* increase did not, until 1936, result in any diminution in the rate of *value* increase. But in 1936 the increase in value was much smaller than that of the volume. The rise in the price of raw silk after 1934 was, however, largely responsible for these movements.

Thus, while production for export had been expanding, the expansion was slowing up and the returns in yen were not growing so rapidly. In international purchasing power the export trade showed an even smaller increase, as is shown by the fact that while the volume of exports more than doubled between 1928 and 1936,

that of imports increased only by 28 per cent. Further, a large proportion of the value of exports was that of the imported raw materials which they contained, and their high prices left little return to the labour and capital used in transforming them into finished articles.

The rapid increase in production was thus visibly outgrowing the capacity of existing markets, and in these circumstances Japanese economic policy developed in two directions: first, the attempt (*a*) to negotiate for lower tariffs in those countries which were restricting their markets, (*b*) to arrange for economic co-operation with China, and (*c*) to foster economic expansion in Manchukuo; secondly, the exploration of every possible avenue of production at home which would lessen dependence upon export markets.

#### *Foreign Market Negotiations.*

The history of Japan's attempts at international economic co-operation since 1935 has been a chequered one involving two tariff wars and numerous trade agreements. These have, at the most, led only to a cessation of further restrictions on her trade, without achieving their removal. At the same time the numerous bilateral trade agreements made between other countries in the world were having the effect of making further concessions to Japan difficult if not impossible. According to a list drawn up by Professor Uyeda in January 1936, some thirty countries had by then applied import quotas to Japanese cotton goods, while sixteen had increased their tariffs on these goods since 1934.<sup>1</sup>

Under the agreement with India in 1934 (amended in 1937 and renewed for a further three years) Japan agreed to restrict her exports to India, and to buy a specified quantity of Indian cotton in return for a reduction in Indian duties on cotton goods.

After abortive negotiations in 1934 between the Japanese and British Governments and between groups of industrialists of the two countries, Great Britain increased the duties on silk and imposed import quotas in a number of British colonies. At the same time an Anglo-Japanese agreement was reached for the restriction of Japanese exports of electric lamps, and later of hosiery and other knitted goods.

In 1934 the Dutch East Indies also proposed to raise the tariff on Japanese goods. Conversations started but it was not until 1937 that an agreement was reached, and then only after Japan's exports had been severely reduced.

<sup>1</sup> Uyeda, *The Recent Development of Japanese Foreign Trade*, Report of Japanese Council to I.P.R., 1936.

Apart from raw silk most of Japan's exports to the United States are subject to exceedingly heavy duties. Early in 1937 cotton piece-goods were placed on a quota basis after a conference between American and Japanese industrialists. The agreement is for two years, with a promise from America that if American demand grows they will consider raising the quota after 1939. Other agreements were later reached concerning hosiery and velveteen. In addition, in order not to encourage further tariff increases or quotas, the Japanese have of their own accord put into operation various restrictions upon their exports to the United States.

By 1935 a dispute with Canada concerning duties imposed to compensate for the depreciation of the yen became critical, but after retaliatory action on both sides a settlement was reached early in 1936, since when a considerable increase in the trade between the two countries has taken place.

In 1936 the Australian Commonwealth Government raised its duties on Japanese textiles. In this case again Japan retaliated with surtaxes and by the end of the year an agreement was reached under which Japan was to limit her exports in return for lower duties.

#### *Economic Co-operation with China.*

Before the depression Japan's largest market after the United States was China, and when later there occurred the checks in world markets which have been described above, Japanese merchants explored anew the possibilities of the Chinese market. An Economic Mission of Japanese business men went to China at the beginning of 1937 to consult with Chinese Chambers of Commerce and other economic organizations. On their return to Japan they reported that the outlook was good while laying emphasis on the need of appreciation in Japan of the progress which had been made towards economic reconstruction by the Chinese Government. Further development was ended by the subsequent outbreak of hostilities.

#### *Manchurian Development.*

In 1936 a 'Five-year Plan' for the economic development of Manchukuo was brought into operation. The plan provides particularly for the development of heavy industries, including the liquefaction of coal and further investment in oil-shale mining. Recently the whole of the Manchurian iron, steel, and engineering, and part of the mining industries have been taken over by a new company, half of whose shares are held by the Japanese and Manchukuo Governments and the other half by one of the newest wealth-cliques, bearing the name of Nissan (Japan industry).

Since 1931 Japanese investment in the country is said to equal about 1,000 million yen, which has largely taken the form of goods, as the following figures indicate:

JAPANESE EXPORTS TO AND IMPORTS FROM MANCHUKUO  
(INCLUDING KWANTUNG)  
(In million yen)

	<i>Exports</i>	<i>Imports</i>	<i>Excess of exports</i>
1931 <sup>a</sup>	77	132	—55
1932	146	128	18
1933	303	168	135
1934	403	191	212
1935	426	217	209
1936	498	239	259
1937	612	294	318
			<u>1,096</u>

<sup>a</sup> Date of Manchurian incident, September 1931.

Japan supplied this large excess of exports in spite of the fact that Manchukuo has to pay interest each year on some 1,700 million yen of capital invested by Japan before 1931. Returns on this capital investment are expected to come in the form of exports to Japan of beans, cotton, wheat, gold, coal, iron, copper, wool (after a long period), timber, certain industrial products, and chemicals, added to emigrants' remittances and the profits on shipping freights.

### *Domestic Planning.*

On May 14th, 1937, a Planning Board was established under the control of the Prime Minister. Its membership was to consist of regular investigators and 'experts in various walks of life'. In addition there was to be a Central Economic Council. In June the Government laid down three basic principles of policy: (1) expansion of production, (2) the balancing of international payments without further depreciation of the currency, and (3) the adjustment of the supply of, and demand for, materials. The aim of these three principles was to strengthen defence (that is, to enable armament expenditure to continue), and to 'stabilize the national life'. Japan and Manchukuo were to be treated as a single unit in all plans.

Under still more recent legislation extensive control is now being exercised over production, consumption, investment, and prices.

Probably the most important single measure is the Capital Adjustment Law, which since September 1937 has controlled the flow of funds into industry. For this purpose, investment proposals are divided into three: those (*a*) for key industries for supplying arms and equipment, (*b*) for luxury industries or industries already over-capitalized, and (*c*) for other industries. The savings of the country are thus to be mobilized and to be invested as the Government and its experts see fit.

The Government has also taken complete powers to manage any branch of the munitions industry. Control has already been assumed over the iron and steel industry, and output and prices are regulated. Duties on certain materials have been suspended and subsidies are being given to some branches of the industry. A company with a capital of 100 million yen, half of which is Government-owned, has been formed to produce oil from coal, and other companies carrying on similar work will receive a subsidy and operate under Government supervision. Plans have also been formulated by Government departments for controlling and expanding the output of electric power and coal.

Consumption is being controlled in three main ways: (*a*) through restrictions on imports, (*b*) through taxes on luxuries, and (*c*) through increased taxes on income and excess profits. Under (*a*) several hundred types of imported goods have been restricted or prohibited, including most Western-style manufactures and leading raw materials; under (*b*), luxury taxes—there is a sales tax on all precious stones, jewellery, photographic materials, and musical instruments; under (*c*), increased taxation—a special income tax ranging from 5 to 10 per cent. of income is added to the recently increased income tax, while taxes on excess profits and extra dividends are also being imposed.

#### *Farmers' and Wage-earners' Conditions.*

The masses, so long as they are employed, are not directly affected by these measures, except those restricting cotton and wool imports. They do not consume Western goods or luxuries; they have few savings to invest and are not subject to income tax. Meanwhile Government policy has tended to raise the peasants' returns from rice and silk and to improve the terms of debt-repayment. It is true that the cost of some fertilizers has during the last two or three years risen considerably more rapidly than the value of the crops which they help to produce, but as the purchase of fertilizers represents only about one-fifth of the operating expenses of farmers, this has not spelt disaster.



During the last few years, however, the increase in the farmers' families has continued and many of the elder children have had to seek their fortunes in the cities. As we have seen, this increase in the supply of workers has kept real wage-rates down though the volume of employment has greatly increased. The actual effects of this on standards of life cannot be judged as there are no satisfactory unemployment figures, but it may be considered probable that the increase in employment and in total earnings has at least compensated for the lower real wage-rates per person employed.

*For note on developments during 1938 see Appendix II, p. 405, below.*

III

CHINA



## CHAPTER I

# BRIEF HISTORY OF CHINESE INDUSTRIALIZATION

MODERN industry was established in China nearly a quarter of a century later than in Japan, and under very different auspices. The systematization and planning which, as we have seen, characterized the rise of industry in Japan in close relation to the internal policy of the country had no parallel in China, where State direction of economic activities hardly existed at all, and where the process of modernization was to a great extent determined by the extra-territorial rights and privileges of foreigners, which included foreign control of the principal ports.

Compared with Japan, therefore, Chinese industrialization has been fortuitous and haphazard. Its beginnings and subsequent development were closely linked up with the foreign trade of the country, and it will be well to preface its history with a short sketch of China's trade development over the period of modern contact with the industrial West.

Until well on into the nineteenth century China was virtually self-sufficing in manufacture. There was a large manufacture of silk (the prerogative of China since classical times), and a considerable production of artistic and 'luxury' goods for the Court and the wealthy classes; there were fairly large-scale potteries and small workshop industries for wood and metal-ware. Apart from these there was little organized industry, the peasant masses supplying the bulk of their common wants, including clothing, by the work of their own hands in the intervals of agricultural labour. The isolationist tradition which had existed since the time of the Ming Dynasty restricted traffic with other countries, there being only a small exchange of goods, in which the export of silk and porcelain and import of furs from northern Asia and of marine products from Japan ranked as the most important.

Chinese indifference to goods from the outside world was counterbalanced by an increasing appetite on the part of the West for Chinese products and by the enterprise of the chartered companies when they started to trade with the Far East. This stimulated the Chinese export trade in silk, tea, cotton cloth, and chinaware, which had to be paid for mainly with silver bullion, the only commodity at that time acceptable to the Chinese on any considerable scale. The exported cotton cloth consisted of the material known in England as 'nankeen'—derived from the name of the recent capital of China—which was finer than the output of the weaving looms of the West, and was in great demand in England for the dress of the period. China was thus, at this period of history, supplying England with the particular article, that is cotton cloth, which later became the staple British export to China.

The discovery of opium as an acceptable alternative to silver in exchange for Chinese exports brought about, in the middle of the nineteenth century, a reversal of the trend of trade, which now became 'unfavourable' to China. The position veered again later, but finally settled down to a normal 'adverse' condition, in which it has remained for the last half-century, becoming intensified to an alarming extent between 1930 and 1933, but reverting to a figure actually below the normal in 1936.

When the nineteenth century entered its last quarter China's external trade was still limited to a small category of products, consisting chiefly of imports of cotton goods and opium and exports of tea and silk. The unimportance to China of her foreign trade at that stage is emphasized in the last Decennial Report (1922-31) of the Chinese Maritime Customs, whose author writes:

'In the enormous cloth requirements of the country foreign importation contributed as it were but one drop to the bucket. Foreign cloth was wanted only for special, not ordinary purposes; had the entire foreign trade of China suddenly ceased in the year 1877, the economic life of the country would have been affected but little.'

It may be said, in fact, that industrial competition from

the West had, up to this time at least, hardly made itself felt in Chinese homes and workshops. On the other hand, from the Western point of view the Chinese trade was becoming increasingly important as an outlet for factory production, and although at this stage it was the cotton industry which was chiefly concerned, a widening range of demand soon began to develop, and China became an importer of a number of simple 'necessities' such as matches, soap, glass, aniline dyes, and tin plates. About this time kerosene too, as a substitute for native vegetable oils for use in lamps, obtained the footing in China from which it grew to the point of becoming (together with liquid fuel and lubricating oil) the second in value among classes of Chinese imports.

Cotton goods, however, became and remained the prime staple of trade, holding the first place in imports from 1885 onwards. At first the principal trade was in cotton 'manufactures' (that is to say, cloth in its various forms, chiefly plain 'shirtings' and 'sheetings'). The import of yarn for the use of the Chinese hand-loom was a rather later development, and was closely associated with the growth of power spinning in India and Japan. India, which had developed her spinning mills much earlier than Japan, was China's chief purveyor at first but was soon caught up by Japan. While the former subsisted on her own production of raw cotton, Japan had to depend on imported supplies. As these came from China a situation arose in which Japan took Chinese raw cotton and returned it to China as yarn, thus, with the help of factory plant, doing for the Chinese what the latter had previously done for themselves by hand. This became a factor in China's own industrialization, since, as Dr. Remer remarks,<sup>1</sup> it 'hastened the decline of spinning in China, and helped to prepare the way for the introduction of power-driven spindles into China'. Great Britain, it may be added, early found herself excluded by Indian and Japanese competition from the Chinese market for all but the finer counts of yarn.

We are thus brought to the time when factory industry

<sup>1</sup> C. F. Remer, *The Foreign Trade of China*, 1926, p. 94.

in China made its first essays in the field of cotton-spinning. It will be convenient, however, before dealing specifically with Chinese factory development, to carry to its conclusion our brief survey of her foreign trade.

China's expanding demand for imported goods was balanced by the discovery on the part of the Western nations of large-scale uses for various Chinese natural products. There developed a very important trade in oil-bearing beans and seeds; animal products—hides, skins, wool, and eggs—came to command an increasing market, and as time went on a trade grew up in several of the less common industrial ores such as tungsten and antimony. Soon after the turn of the century China's foreign trade was very substantially expanded by the rapid extension of railways, the construction of some 7,000 miles of which within a few years opened up immense new areas to trade. Railway-building, and subsequently factory-erection, created in their turn a demand for imported engineering products, which has still more recently extended to electrical plant for industrial and municipal installations.

To go back to the early years of the century, Japan's successful war against Russia, by launching the former country on its rapid industrial career, greatly increased the Japanese share in the China trade, and her exports of cotton goods in particular advanced by leaps and bounds. The Great War had a very similar effect. Japan for a time captured the Chinese market, her exports of cotton piece-goods of the commoner varieties eclipsing temporarily those of Great Britain. China, however, had by now firmly embarked on her own industrial career, and began to win back for herself the supplying of her own needs of cotton yarn. Cotton mills multiplied in China, while at the same time the cultivation of the cotton plant steadily spread and increased. The machinery required for the mills was imported chiefly from England, who thus found herself supplying one of her best cotton-goods customers with the equipment needed for the killing of her own trade.

The period from the end of the War to the present time has witnessed further important changes in the trend

and character of Chinese foreign trade. Up to 1929 both imports and exports rose steadily, but from that date onwards the export trade began to decline with alarming rapidity, while imports followed in their wake after 1931. Recovery from the slump began in 1934 in the case of exports, and a year later in the case of imports, the rise in exports being by far the most pronounced. On the export side silk, which had formerly been the main staple of the trade, suffered particularly from increased Japanese competition coupled with the lack of demand for luxury products, and after 1928 lost its position at the head of the exports list. Raw cotton meanwhile rose in order of importance and constituted, in 1933,  $6\frac{1}{2}$  per cent. of the total of Chinese exports, a figure which had fallen, however, to 4 per cent. in 1936.

Similarly the mainstay of imports, namely cotton piece-goods, fell from the first place to an insignificant position on the export list, being in 1936 less than 2 per cent. of the whole, while cotton yarn experienced an even greater collapse. From holding, at the beginning of the period with which we are dealing, the second place among imports, its importation had diminished by 1936 almost to the point of extinction. In place of cotton goods generally, China became an importer primarily of foodstuffs and raw cotton, the percentage of total imports represented by rice, wheat, and sugar being as much as 20 per cent. in 1933, though in 1936 it had dropped to 11 per cent. while raw cotton was 4 per cent. of the whole.<sup>1</sup> Apart from these changes there came about a considerable diversification of imports which now began to include among the important items chemical fertilizers, motor vehicles, and electrical machinery; woollen goods too, which all through the previous century had striven in vain to establish a market in China, now became an important import.

It has been thought desirable to preface the history of

<sup>1</sup> The explanation of China's two-way trade in raw cotton is, of course, that she exports the shorter-staple and imports the longer-staple variety, a combination of the two being generally required by modern spinning mills.



Chinese factory development by this sketch of the foreign trade, because of their interrelationship. This is due partly to the large role which foreign enterprise has played in the industrialization of the country, and partly to the fact that when factories started in China the great majority of them were for the manufacture of cotton products, which formed the chief article of import for the China market. As this market was till recent years a substantial element in world markets, its loss is in itself, and apart from the question of Chinese competitive exports, a matter of serious moment to the manufacturing countries of the West. It is now time, however, to turn our attention from trade to the rise and development of modern industry in China.

Factory development may be said to have taken its start from the Treaty of Shimonoseki, which concluded the Sino-Japanese War in 1895. By the terms of the treaty Japanese nationals obtained the right to engage in manufactures in treaty ports and 'open' cities, and to import machinery for the purpose, with the stipulation that goods manufactured in China should be on equal footing with imported goods in regard to internal charges and privileges. Under most-favoured-nation clauses these rights automatically accrued to the other 'treaty' Powers.

The Chinese, prior to this, had established no more than two or three power factories, the first being a cotton mill built in 1890 by the enterprise of the renowned statesman Li Hung-chang. The earliest foreign-owned mills to be set up in China under the privileges accorded by the new treaty were established at Shanghai by British, Germans, and Americans. Within a short time native-owned factories began to make an appearance, sporadically at first, but soon in increasing numbers.

In the ten years subsequent to the treaty factory development made but small progress and at the end of the period there were still only seventeen mills in China, of which four were foreign-owned. From this point onwards there was a slow but steady growth, chiefly in the form of cotton mills, but including also flour and oil mills, and soap, candle, glass, paper, match, and cigarette factories.

The Great War, by checking foreign, other than Japanese, exports to China, provided a boom period for Chinese factories which established Shanghai and, to a lesser extent, Tientsin and one or two other ports, as important industrial centres. Between 1915 and 1920 the number of cotton mills doubled, the spindleage increased by nearly 50 per cent., and looms more than doubled in quantity. There followed a post-war slump, as in other countries, which weeded out many of the smaller factories, especially Chinese-owned, which had sprung up under the influence of the boom. This increased considerably the ratio of foreign, or rather of Japanese-owned, mills, since the British-owned remained constant in number, their proportion of the whole declining from 20 per cent. in 1915 to about 5 per cent. ten years later.

From 1925 onwards the expansion of the cotton industry in China, measured by the number of mills and quantity of equipment, has advanced steadily but at a much slower rate, while other less important industries, most of which are of considerably later origin than the cotton mills, have shown a more rapid rate of development. A general bird's-eye view of industrial development from the early days of the cotton mills up to 1930 can be obtained by a perusal of the following data supplied in the appendix to Professor Tawney's *Land and Labour in China*:

	1898	1900	1910	1913	1920	1925	1926	1927	1928	1929	1930
Cotton mills	12	17	26	28	54	118	118	119	120	..	127
Cottonspindles(in thousands)	417	565	831	1,210	1,650	3,569	3,414	3,612	3,613	..	4,223
Cotton looms (in hundreds)	21	..	..	..	95	216	259	298	298	..	293
Flour mills.	..	3	31	57	141	176	..	..	193	193	..
Factories of all sorts in Shanghai employing over 30 workers	..	..	..	70	192	316	381	449	540	648	837
Factories in all China employing over 30 workers (not including Tientsin)	..	..	..	245	673	1,009	1,223	1,347	1,542	1,747	1,975

Adequate material is not available for tracing statistically up to a later date the growth of Chinese industries as a whole, but figures can be given for the cotton industry.

## CHINA

## COTTON MILLS

		1931	1932	1933	1935
Chinese	. .	82	84	89	95
Japanese	. .	45	41	41	44
British.	. .	3	3	3	5
Total	. .	130	128	133	144

## SPINDLES (IN THOUSANDS)

		1931	1932	1933	1936
Chinese	. .	2,383	2,465	2,637	2,691
Japanese	. .	1,630	1,715	1,790	1,946
British.	. .	169	170	183	136
Total	. .	4,182	4,350	4,610	4,773

## LOOMS

		1931	1932	1933	1936
Chinese	. .	15,918	17,829	19,081	21,903
Japanese	. .	13,554	15,983	17,592	21,606
British.	. .	2,480	2,691	2,891	3,991
Total	. .	31,952	36,503	39,564	47,500

(Note: The figures for 1931 to 1933 are those published by the Social Problems Research Institute of Tokyo; those for 1936 are the figures given in Sir Louis Beale's *Report on Economic and Commercial Conditions in China, April 1935-March 1937*, issued by the British Department of Overseas Trade.)

Between 1930 and 1934 the cotton textile industry suffered a severe depression, at the worst period of which nearly one-half of the Chinese-owned spindles were standing idle. The Government had to come to the rescue of the largest Chinese cotton-mill combine, which was on the brink of bankruptcy. The financial straits into which the Chinese mills then fell gave the opportunity to Japanese companies to buy up properties, and a number of mills, especially in the Northern Provinces, passed from Chinese into Japanese ownership. By 1937 nine out of ten cotton mills in Tsingtao were in Japanese control, representing, according to Japanese calculation, over half a million.

spindles and nearly 9,000 looms;<sup>1</sup> in Tientsin also a large proportion of the Chinese mills had been purchased by Japanese, who controlled there about 180,000 spindles and more than 1,000 looms, compared with some 130,000 spindles and 600 looms in Chinese ownership.

The astonishingly steep fall in China's import trade in cotton goods generally (piece-goods of all descriptions, yarn, thread, and 'sundries') which accompanied the rise of the domestic textile industry may be shown by a short table of annual values as recorded by the Chinese Maritime Customs:

*Value of Cotton Goods Imports*

1929 \$268 million	1932 \$112 million	1936 \$16 million
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The decline in the import of yarn had begun already during the Great War and has proceeded rapidly since 1919. From a total of 187 million pounds of yarn imported in that year the figure dropped to 3 million in 1934 and to slightly under 1 million in 1936. Thus what was once the leading item among foreign imports into China has come within measurable distance of total extinction. The drop in the importation of yarn was meanwhile covered more than twice over by a rise in local production, which from 440 million pounds in 1919 increased to a high point of 943 million in 1929, after which, hit by the depression, it declined by about 60 million to 882 million pounds (estimated) in 1936.

Power weaving developed more slowly than spinning, and it is only within the last six or seven years that local output of cotton cloth has caught up with imports. The year 1905 marked the high point in imports, but, in spite of violent fluctuations due to political and exchange vicissitudes, the trade kept up well till 1929. Since then the fall has been rapid and steady. The rate of decline can be seen by the following figures<sup>2</sup> showing the quantity of cotton cloth imported into China between the years 1928

<sup>1</sup> It has been reported that most, if not all, of these Japanese mills at Tsingtao were blown up as an act of war in December 1937.

<sup>2</sup> Statistics derived from the Joint Committee of Cotton Trade Organizations.

and 1935 from Great Britain and Japan, the two principal sources of supply:

IMPORTS OF COTTON CLOTH  
(In million square yards)

1928	1929	1930	1931	1932	1933	1934	1935
626	648	490	362	336	194	115	119

Production meanwhile assumed substantial proportions after 1915, when the estimated output of factories in China was 45 million yards (say, very approximately,  $1\frac{1}{2}$  million pieces). Since then the growth of output has been as follows:

DOMESTIC PRODUCTION OF COTTON CLOTH  
(In million square yards)

1930 . . .	577	1934 . . .	931
1932 . . .	729	1935 . . .	991

Capture of the local market is not the only achievement of the cotton mills in China. Their exports to foreign countries have reached the point of becoming a significant item in world cotton exports. The following table gives a general view of the growth of China's export trade in cotton goods, columns being added to show the balance between import and export:

CHINESE EXPORTS OF COTTON GOODS

Year	Cotton yarn (in thousand piculs <sup>a</sup> )			Cotton piece-goods (in thousands of pieces till 1931, and thenceforward in Chinese dollars)		
	Export	Import	Import balance	Export	Import	Import balance
1913.	1	2,685	+2,684	0	30,754	+30,754
1920	69	1,325	+1,256	58	24,737	+24,679
1924	146	576	+430	1,370	23,165	+21,795
1929	344	234	-110	2,249	26,095	+23,846
1931	613	48	-565	1,478	12,360	+10,882
					(in value)	
1932	346	95	-251	\$47 million	\$113 million	+\$66 million
1933	541	28	-513	\$47 million	\$56 million	+\$9 million
1934	420	19	-401	\$7 million	\$26 million	+\$21 million
1935	218	16	-202	\$3 million	\$20 million	+\$17 million
1936	140	9	-131	\$9 million	\$12 million	+\$3 million

<sup>a</sup> 1 picul = 133 lb.

The table shows how China changed over from being an importer to an exporter, on balance, of cotton yarn rather over a decade and a half ago, while in regard to piece-goods, although her exports have never actually equalled her imports the margin between them, after the recovery of the domestic industry from its recent stage of acute depression, had narrowed to the insignificant figure of \$3 million.

A word should be added concerning the destination of China's cotton exports. Of the exported yarn more than one-third went to India, while Japan and Korea together took 13 per cent., and the Netherland Indies, the Philippine Islands, and Siam small proportions each. In the case of cotton piece-goods the chief buyer in 1936 was British West Africa, whose purchases of cotton shirtings and sheetings increased in that year seventeen-fold (from 1,900 to 32,000 quintals) and represented nearly three-quarters of the total export from China. The next importers of cotton cloth from China in order of importance were Hong Kong (for reshipment to various markets), British Malaya, the Kuantung Leased Territory, and the Philippine Islands.

Although the cotton industry dominates the picture of Chinese industrialization, at least when viewed from the standpoint of the present volume, there are other manufacturing industries establishing themselves in China which are too important to be overlooked, and a short survey will now be given of the position of some of these. Included in the cotton industry itself is the hosiery knitting industry which produces goods for the home market valued at \$12 million a year.

Besides silk and cotton, the Chinese textile industry extends also to woollens and—at present to a very minor extent—to rayon manufacture. There are eight woollen yarn factories (five of them in Shanghai, of which two are British and one Japanese, and the rest in the north) and a dozen or so modern-equipped factories producing coarse woollen textiles, four of which are operated by the central or provincial Governments. The effect of the establish-

ment of a woollen industry in China upon the trade in wool and woollen goods (yarn and fabrics) can be judged by the recent import figures, which show the following movement:

IMPORTS OF WOOL AND WOOLLEN GOODS  
(In million dollars)

	1934	1935	1936
Wool (carded, combed, and waste, including 'tops') . . . . .	5.5	5.9	16.2
Woollen yarn . . . . .	12.7	2.9	3.0
Woollen textiles . . . . .	14.0	9.0	7.2

The imported wool is practically all British, but nine-tenths of the imported woollen yarn has come from Japan, who incidentally has taken in the past a similar proportion of China's total exports of sheep's wool in the raw state.

Flour mills are, after textiles, the most important industry financially. The number of mills slightly exceeds a hundred, nearly all in Chinese ownership. With the great increase in the importation of wheat (coincident, as it is affirmed, with a gradual change of diet among sections of the population in Central China) the flour-milling industry is likely to continue to expand, at the expense—in so far as international competition is concerned—chiefly of Japan, whose mills have hitherto found a good market in China.

Electrical goods have in recent years been manufactured in increasing quantities, especially electric bulbs, of which last China now produces sufficient to meet the domestic demand, estimated at about 20 million units a year.

Cigarette manufacture has made rapid strides largely under the impulse of the foreign interests concerned, headed by the British American Tobacco Company. Some years ago native factories were growing up and competing keenly, but the severity of Chinese taxation caused a large proportion to suspend business.

Rubber goods—boots and shoes for the most part—employ about forty factories with an estimated aggregate output for 1933 of goods of the value of \$6½ million.

Metal manufactures and the engineering industry have not yet attained to importance from a competitive point of view, though the aptitude of the Chinese mechanic, as shown, for instance, in the railway repair shops, proves that lack of skilled workmen is not likely to be an important factor in holding back development. Foundries have considerably increased in the recent period, and in 1936 there were reckoned to be 625 machinery makers scattered over China, producing the cruder and simpler forms of machinery in great variety, ranging from generating motors, pumps, boilers, presses, and lathes to machinery for cotton and flour mills. Foreign engineering firms are already showing a tendency to partial manufacture in China.<sup>1</sup> A factory for the manufacture on a fairly large scale of textile machinery, the China Iron Works, was erected and operated for a time in Shanghai, but failed, partly, it is said, owing to litigation. In the light metal industries a considerable advance has lately been made in the manufacture of aluminium articles by small-scale businesses.

The chemical industry has made a start in China during recent years. Heavy acid plants exist in Shanghai, and the manufacture of nitrogen began there a short time ago. In North China there are soda-ash plants which claim to meet fully 50 per cent. of China's requirements. Heavy acid plants exist also in Honan and at Canton. Early in 1937 a synthetic-nitrogen factory was opened near Nanking with an annual capacity of 50,000 tons of sulphate of ammonia. In alkali China now supplies one-half of her own requirements. A beginning has been made in the manufacture of simple dye-stuffs.

After this review of the growth of separate industries we must conclude with a few observations on the general nature of industrial development in China. As already intimated, it has been little subject to general planning or co-ordinated control. We shall come in the next chapter to consider in greater detail the political background of

<sup>1</sup> See Beale, *Economic and Financial Condition of China, 1935-7*, p. 43.



Chinese industrialization. It will be sufficient to point out here that industry in China has developed to its present point in the face of peculiar difficulties, of which not the least have been the absence of central authority able to exert a steady directive influence; the rudimentary means of communication which is all that exists in large parts of the country; the obstacle to the movement of goods represented by an often arbitrary system of local tax barriers; the lack till recently of a single medium of currency throughout the whole country (the dollar-rate varying from place to place and often in a widely fluctuating manner); and, finally, the fact that the industrial centres of China are divided between Chinese and foreign administrative control and the industries themselves separated into two sharply distinguished categories, the Chinese- and the foreign-owned. As a result of these handicaps development has in the past taken place in an essentially casual and unregulated manner. There has been a rapid growth of new industries in the commercial cities of China, but owing to lack of organization the result has often been local over-production followed by a crop of failures. Encouragement by the Government has only lately ceased to be slight and sporadic, while investment support from the Chinese public and banks has been weak for reasons to be dealt with later, and foreign financial assistance, except in the special case of the foreign-owned treaty port mills, has been tapped only very slightly.

The initial advantage which China possessed in the patience, industry, and manual dexterity of her workers and the intelligence and business aptitude of her educated classes was thus negated by her inability to exert a national co-ordinated effort such as led to the remarkably quick industrial development of Japan. Though she owed this inability partly to political circumstances outside her immediate control, she was also hindered from rapid progress by national habits and traditions which will be mentioned more specifically in Chapter III.

One such handicap, which we may mention here as it provides a further illustration of the differences between

Chinese and Japanese development, lay in China's slowness to take advantage of foreign technical training and assistance. Whereas in Japan students were sent abroad to train, and foreign technicians were imported, as part of the national policy, there was in the case of China no similar organized attempt to profit by Western example. Foreign specialists were seldom engaged except when their employment was stipulated as part of the terms of a foreign loan contract, as in the case of most of the railways, and the sending of students for technical education abroad was left mainly to private initiative. The 'returned students' themselves have played a comparatively minor part in the industrialization of the country, this being due partly to the smallness of their numbers, partly also, perhaps, to the prejudice which is said to exist against their employment on the ground that their expectations of salary are too high for local standards, and that they are apt to show an unwillingness to enter 'low down the ladder' and to soil their hands with manual labour. However this may be, it is certain that China has not, in the matter of industrial development, systematically copied the West, as did Japan, though this has been partly compensated for by the existence in China of foreign-owned factories conducted on modern lines, which in practice have served the purpose of models.

On the other hand, an authoritative writer upon Chinese industrial conditions, Professor H. D. Fong (who, in a recent study of 'Industrial Organization in China',<sup>1</sup> has placed the lack of organization as one of the chief hindrances to the expansion of Chinese industrial production), attributes the causes of the failure to develop a better system of organization in the first place to too great suddenness in the introduction of Western methods and in the change-over from primitive to modern equipment. The workers, in particular, have not, he considers, had time to adjust themselves to fundamental changes of system; they are still to a large extent unfamiliar with the 'wage incentive' and are not yet sufficiently accustomed either to

<sup>1</sup> See the *Nankai Social and Economic Quarterly* for Jan. 1937.

discipline or the handling of modern tools. The non-response of the Chinese to the 'wage incentive' is due to the workings of the 'family system' which is so typical of China. Broadly speaking, any rise in wages or salary above subsistence point goes to benefit the wage-earners' dependents, rather than the earner himself; the more he earns, the wider the circle of relatives who will look to him for assistance. Referring to other obstacles to the development of modern large-scale industry in China, Dr. Fong points to the fact that the Chinese trade guild system has not, as was the case in England, been absorbed by a gradual process into the wider trade and labour organizations of the present day, but still retains much of its original monopolistic character which fetters the development of large-scale operations. He also emphasizes the absence of accepted uniform standards in regard to the quality of native raw materials intended either for local manufacture or export, and of any adequate control over their production and marketing. This means that not only is there no proper grading of such commodities as raw cotton, but also that there are no guarantees against adulteration, which is so prevalent in the cotton trade as to earn from the writer the description of 'an intolerable curse'.

The foreign-owned factories form a separate class, to which the preceding remarks do not for the most part apply. Their development has been the result of regular organized effort, especially in the case of the large cotton companies which own most of the cotton mills. These latter have grown up with solid financial support. Having greatly superior reserves and a more conservative organization, they, as a class, weathered the recent depression far more successfully than the factories owned by Chinese. Their position is closely linked up with the development of the treaty ports, in which they are chiefly situated and where the shipment and handling of imports and exports, the processing and packing of the latter, banking, and other essential services connected with overseas trade, are mainly in the hands of the foreigners—or, if not of the foreigners themselves, of specialized classes of Chinese

business men working in close conjunction with foreigners. The treaty ports, being the emporia for foreign trade and having for this reason, and because of the greater security existing in foreign-controlled territory, drawn to themselves a disproportionately large part of the wealth and enterprise of China, are the nuclei of industrial development both foreign and Chinese. In recent years important changes have, it is true, begun to take place in regard to this situation. The political status of the ports themselves, involving foreign control, has of late been modified both by treaty revision and by the unilateral curtailment by China of foreign rights and privileges. Simultaneously the characteristics of treaty port trade were weakened and diluted by the growth of direct trading between the Chinese importer and the producer abroad, by the rise of Chinese 'foreign-style' banks and of similar institutions, and by the opening up of the interior to the enterprise of the great 'distributing' companies engaged in the sale of tobacco, petroleum oil, chemicals, &c. Nevertheless, the existence of the treaty port system remains a vital factor in Chinese industrial development, though one cannot foretell what changes may ensue from the situation produced by the present Sino-Japanese conflict.

The fact has already been mentioned that a large fraction—estimated a few years ago at four-fifths—of the cotton cloth consumed in China still comes from the native hand-loom scattered over the country. Though Chinese 'cottage' industry affects world commerce mainly in so far only as it competes with imports in meeting domestic demands and releases Chinese factory production for export to other markets, its importance in the future economy of China is capable of being so great that it cannot be left out in a survey, however brief, of Chinese industrialization. Even in highly industrialized Western countries a reaction has lately set in in favour of scattered small-scale industries as economically desirable, if only as a safeguard against the recurrent phases of unemployment which seem to result inevitably from the mechanization and 'rationalization' of industry. In China, which still

stands at the parting of the ways, there is a strong academic body of opinion, shared and supported by some political leaders, in favour of the principle of dispersing industrial activity over rural areas as opposed to the encouragement of large-scale units in industrial cities. A dense population of farmers with a large margin of time available for side-occupations<sup>1</sup> and a tradition of home industry, helped by increasing communications and the spread of electric power, make the decentralization of Chinese industry a more practical proposition than it would be in most countries. Especially in the north of the country, rural industries have long existed, in some cases on almost a mass-production scale, though under very ill-organized conditions. As regards organization, however, a considerable amount of research, education, and experimental work has been done in recent years, chiefly in connexion with agricultural credit, farmers' co-operative societies, and the improvement of machinery and methods—the work being often linked up with wider schemes, both private and official, of mass education, public health, cultural progress, &c.

Rural industries in China are not always an alternative form to large-scale urban industries; they are in some cases complementary. This is so in the textile industry, where certain processes, e.g. dyeing and finishing, are 'farmed out' by the manufacturers in the towns to home workers in the country. In addition to established industries, including, besides those just mentioned, hosiery-knitting, paper-making, pottery, glass, and carpet manufacture, there have been recent attempts at the scientific introduction of new rural industries, the necessary training of the local populace being a part of the scheme. Woollen manufactures and iron-smelting are among the trades which it has been hoped thus to establish.

Dr. Fong has pointed out in his *Rural Industries in China* that the products of rural industries are by no means confined to the local market. 'In a large number of cases',

<sup>1</sup> Professor Buck's study of farm labour shows an average of only about ninety-five days a year spent directly on farm work.

he states, 'they figure prominently in domestic or foreign exports', and he gives a list of sixteen types of exports from China supplied from the product of rural industries. He adds, it is true, that most of these have declined in the last half-century, but there are signs of the possibility of a reorganization along modernized lines which may very possibly lead to a revival and fresh development.

To sum up in a few words, modern industry in China dates back only some forty years. It started at a time when trade with Western countries was already long established, when the Chinese had developed a steady demand for a variety of foreign manufactures, and when factory-made cottons had come into vigorous competition with the hand-loom product. Aided by the abnormal conditions attending the Great War, when China was cut off from many of her principal sources of import, factories in China, partly Chinese partly foreign-owned, expanded rapidly, especially the cotton mills, the most important class of all. Since the War industrial development in China, while experiencing the succession of booms and slumps more or less common to all industrial centres, has made substantial growth and, in the case again of cotton goods, reached the point of replacing imports to a very large extent and of contributing a by no means negligible quota to world exports. In other lines of manufacture of a competitive nature China has lately shown considerable capacity for expansion in such commodities as glass, cigarettes, and rubber goods, though these are still minor industries. Industrial development has been till very lately subject to little regulation and has taken place in two essentially separate directions, the Chinese-owned on the one side, the foreign-owned on the other. Finally, parallel with factory development in the treaty ports and other cities, rural manufacturing industries have persisted among the peasants and, though many are now declining, others have been invigorated or revived and, under more scientific direction, represent a significant side of Chinese industrialization.

## CHAPTER II

### PRESENT CONDITIONS

#### I. NATIONAL INDUSTRIAL POLICY<sup>1</sup>

REFERENCE was made towards the end of the previous chapter to the duality in China's industrial structure resulting from the existence side by side of Chinese- and foreign-owned factories. This state of affairs makes it peculiarly difficult to generalize about industrial conditions, and the most practical method of treatment will be to divide the subjects to be discussed into two classes, dealing first with those of a rather more general nature affecting factories as a whole, and subsequently with those in dealing with which one is forced to differentiate between Chinese- and foreign-owned units. At the head of the former category we must place the political state of China and the relations of the Nationalist Government to industry.

The existence, or non-existence, of a central authority able to assure law and order and guarantee peaceful development is fundamental to the whole question of China's economic reconstruction. It would be beyond the bounds of the present study to discuss in any great detail the political state of the country. In general, however, it may be stated as a commonly recognized fact that, although China's recovery from a state of political disruption and widespread military domination had been proving a slow process and subject to frequent setbacks, there was already before the present conflict a visible movement towards greater unity and a stronger system of Govern-

<sup>1</sup> The main substance of this section of the book has been left as it was written in 1934 with such revision as has been necessary to bring it into line with conditions existing immediately before the outbreak of hostilities in the summer of 1937. While, to repeat what has been said in the preface, the nature, extent, and permanency of the changes which may follow from the war are obviously beyond computation, it appears justifiable to retain the following pages in view of the possibility that, when peace returns, at least some of the forces described therein as shaping Chinese industrial development will prove to be again operative.



mental control. On the other hand, it is more than questionable whether China had attained to the degree of stability necessary for a native industrial expansion on a really large scale. The chances of civil war, the danger of local disorders, the risk of oppressive action by irresponsible local authorities had been and still were strong deterrents to progress over the greater part of the country. In the larger towns conditions tended to become increasingly stable and central Government control was already well established over the region of Central China, where modern industry is for the most part to be found. An important fact to keep in mind is the unusual power of resistance to adverse political conditions possessed by the Chinese people, of which we have had frequent examples in the tenacity shown by the peasants and merchants in maintaining agriculture and trade in the face of civil unrest. Finally, political troubles in China are, up to a point, discounted by the fact that internal disorders have tended to concentrate wealth, and so to stimulate production, in the foreign-controlled areas, which are the chief centres of manufacture, though against this has to be set, of course, the corresponding impoverishment of the domestic markets which those centres serve and the disorganization of the districts supplying the raw materials.

The existence of extra-territorialized areas has been, meanwhile, *per se* a hindrance to industrial development on any national basis because it perpetuates the duality referred to above, consisting of two separate categories of manufacturing enterprise, the Chinese and the foreign. It limits the effective scope of any industrial policy adopted by the Chinese Government, and it prevents the creation of unified systems of control and organization.

Bearing this limitation in mind, we will proceed to the Government's policy towards industry. In the first years of the Nationalist Government, when its political orientation was still undetermined, there was considerable uncertainty as to whether industry in China would develop under a socialist or a capitalist system, an uncertainty which had a retarding influence upon the growth of



industries. Although the respective fields of private enterprise and of State undertakings still remain imperfectly defined, the Government did a good deal towards clarifying the position. Nothing in the nature of State socialism has been adopted, and individual enterprise has been allowed much the same freedom as that enjoyed in most of the capitalist countries. Taking railways as an example, although by far the greater part of China's railway system is Government-owned, construction and ownership, or semi-ownership, by private companies has been both permitted and encouraged, as recent illustrations of which one may quote the building of the Hangchow-Kiangshan line by a syndicate of Chinese bankers, and the construction by private Chinese companies of the Nanking-Sun-chaiopou and the Huainan lines.

This does not mean that the Government in China, whether central or provincial, disinterested itself in industry. On the contrary, planned industrial development occupies a prominent place in the Government's schemes for economic reconstruction. The broad lines of their industrial policy consists in the following: (i) the operation, in principle, by the State itself of the heavier industries, leaving to private enterprise all others except those which may be declared State monopolies (tobacco and matches have at times been officially suggested) or such as are considered to be of national strategic importance;<sup>1</sup> (ii) Government collaboration with private finance in the establishment of new enterprises; and (iii) Government encouragement and support of the major established industries, such as silk and cotton, and the active promotion of home industries in competition with imports from abroad. In broad terms, the Government policy aims at industrial self-sufficiency within the limits suited to China's present economy.

These principles have been represented rather in plans for the future than in effective Government measures. Government factories are few, although the central or

<sup>1</sup> A State monopoly of aluminium and tungsten deposits in certain provinces was declared a few years ago.

provincial Governments have lately embarked on the establishment of certain 'key' industries including an iron and steel works, an ammonium-sulphate factory, and a 'central machine shop'. Schemes for more purely commercial enterprises such as paper mills, rayon mills, and the plant for producing commercial alcohol have also been undertaken, the capital being raised partly by Government and partly by private investment. State encouragement of existing industries has taken the form of protective customs duties and Government subsidies to depressed industries, notably silk.

Since China was freed in 1928, as the result of international agreement at the Washington Conference, from the 'servitude' of a fixed conventional tariff, there has been a succession of rising import tariffs, the last of which was promulgated in July 1934. Whereas until very recently the Chinese Government has used the tariff almost solely as a revenue-raising instrument, it has lately shown a growing tendency to treat it—even at some financial sacrifice—as an instrument of national economic policy. The 1933 tariff was thus made to bear far more heavily than before on cotton goods,<sup>1</sup> which in the case of coloured piece-goods pay as much as 30 per cent. *ad valorem*, and its effect in restricting imports and *pro tanto* encouraging home production is reflected—with other contributory factors—in the steep decline of imports of cotton goods referred to in the previous chapter.

The benefit to Chinese exporting industries of tariff protection was offset by the introduction in 1931 of increased export duties, averaging  $7\frac{1}{2}$  per cent., applying to all the staple articles of China's export trade except silk, but this was revised in 1935 when duties were abolished on many categories of exports, including cotton goods, alcohol, and cigarettes, and reduced on oils and eggs *inter alia*. As will be mentioned again later, the

<sup>1</sup> This was made possible by the expiry in 1933 of China's treaty with Japan of May 30th, 1930, by which she bound herself not to raise the import duties on specified articles, including cotton goods, in which Japan was interested as an exporter.

Government adopted the policy of encouraging certain classes of home industry by granting exemption from this duty.

For the cotton industry a 'Cotton Industry Commission' was set up in October 1933, under the auspices of the National Economic Council, consisting of representatives of cotton-growers, merchants, and manufacturers under the chairmanship of a banker. Its function was to stimulate the production of raw cotton in China and improve conditions of transportation and marketing, to establish research into seed selection and set up testing centres, and to organize the finances of the manufacturing section of the industry and promote the replacement of obsolete manufacturing machinery. Having first dealt with the raw materials, it proposed to establish eventually standards of factory equipment and operation as well as of working conditions. The Commission was thus intended to exercise a comprehensive control over the entire cotton industry of China, though this control, as has been pointed out by its chairman, does not imply nationalization nor the elimination of private capital but rather the 'pooling of intellectual resources and technical knowledge to form a united front'.<sup>1</sup>

The establishment of this Cotton Commission was the first important act in the industrial sphere of the National Economic Council set up in 1931, with the help and participation of the League of Nations, to assist the Chinese Government in economic matters. The Council was entrusted with Government funds and invested with wide powers to plan, supervise, and direct 'reconstruction' projects and, in special cases, to act as their agent for executing such projects.<sup>2</sup>

<sup>1</sup> A similar Commission dealt in the same way with silk.

<sup>2</sup> For a statement of the origin, functions, and activities of the National Economic Council see the report to the League of Nations by the League's technical agent on the Commission, Dr. L. Rajchman, dated April 1st, 1934. The Council consists of the head of the Government and the Ministers principally concerned and of eleven appointed members from among bankers and industrialists. Its exact relationship to the Government has not been publicly defined.

For the encouragement of home industries as a whole regulations have been made providing for exemption from export duty, for the reduction of import duties on raw materials required, and of transport freights, and for the giving of Government grants. These privileges apply to Chinese manufactures competing with foreign imports, goods manufactured for export, and newly established industries. To enjoy the benefit of these privileges companies must admit a controlling interest by Chinese capital.

Chinese industry and commerce were till lately comparatively free from legislative and administrative control of a regular nature. A change has come, however, in recent years, through the enactment of a large body of new laws and administrative regulations affecting commercial establishments. These include company and factory laws, the establishment of national bureaux of standards, trade-marks, &c., and Government inspection of export merchandise, besides fiscal measures such as the 'business tax' on capital and turnover. Since much of this recent legislation has been only partially operative it has not been possible to determine the effect on industrial development. In so far as taxation is concerned there has been a noticeable tendency to increase its regular forms as distinct from irregular levies. In a period of revenue deficiencies combined with heavy military expenditure, the contributions to be exacted from business and industry in the shape of excise, &c., cannot be light, particularly in view of the fact that it is difficult, in the absence of effective official machinery, to reach a high degree of efficiency in the levy of income tax and other direct forms of taxation. A basis of comparison with the taxation burden in other countries cannot be established, but as an indication of the extent of 'legal' taxation it may be mentioned that the 'consolidated taxes' produced in 1935 from four major industries, namely, tobacco, cotton yarn, matches, and cement, a sum amounting to \$108 million.

Labour and factory laws, based largely on Western models, are among the recent additions to China's legal

codes. The period between 1929 and 1931 saw the promulgation of an Industrial Dispute Act, a Factory Act, a Labour Union Law, and a Law for Factory Inspection.<sup>1</sup> The Factory Act prohibits night work for women, limits hours of work and the ages of workers, prescribes conditions for their safety and welfare, and provides for the setting up of factory councils. It is generally felt, and would even appear to be unofficially recognized by the Administration, that the labour laws set a standard very materially beyond what is immediately attainable in China and that if they were applied literally they would completely dislocate the industries concerned. This view is substantiated by the report, in 1932, of the International Labour Office's expert adviser to China, who wrote:

'The new Chinese Factory Act deals with the most varied questions all at the same time, and right at the outset adopts the most modern solutions which have only been reached in other parts of the world by a more or less slow and gradual process of development.'

In 1934 it was decided by the Government that the Factory Act should be applied by gradual stages (though an important practical step was taken in 1931 by the establishment of a training institute for factory inspectors) and it seems safe to presume that restrictive regulations of working conditions will proceed slowly. In the meantime factory regulation in the Shanghai Settlement under international control has also been slow to develop owing partly to the natural disinclination of the Municipal Council to handicap local factories with restrictions more severe than those actually enforced on neighbouring Chinese territory, and partly also to the difficulty of agreement with the Chinese authorities concerning the functioning of Chinese factory inspectors inside the Settlement boundaries. These difficulties were, however, partly overcome by an agreement concluded in July 1936 with the Municipal Council providing for a mixed board of inspectors

<sup>1</sup> In connexion with the last-mentioned law, regulations concerning factory safety and the carrying out of factory inspection were promulgated in October 1935.

empowered to enforce within the Settlement those sections of the Chinese labour laws which the Chinese Government have found possible to enforce elsewhere in China. China, it may be added, has been represented at the Geneva Conference of the International Labour Office and was elected to a place on its governing body in 1934.

Lest this description of the Chinese Government's action towards industry should convey an impression of a higher degree of organization and clearer political ideals than in fact exists, it should be read in the light of the fact that, while with one hand the Government has pursued a policy of encouragement, with the other it has tended often to treat industrial enterprises, like all other profit-producing agencies, as a lamb to be shorn and that in many cases the Government's interest in industry appears chiefly as that of a tax-collector.

## 2. DISTINCTIVE FEATURES OF THE INDUSTRIAL STRUCTURE

### (i) LABOUR

We now turn to labour as the next on the list of governing factors in Chinese industrialization. Unskilled labour for industrial development is virtually inexhaustible. A great improvement in agrarian conditions might, it is true, affect the flow of labour to factories, but an improvement on such a scale is, unhappily for China, a decidedly distant prospect. In the meantime factories can count on being able to draw almost indefinitely on the agricultural population at least for short-term workers. As in Japan, the labour turn-over in the factories is rapid; the village people—the women especially—come to industrial centres to work for a year or two, after which they return home with their savings. At Shanghai, according to Dr. H. D. Fong's inquiries, 50 per cent. of the workers leave within three years, and although this includes a great deal of migration from older to newer factories in search of better wages, it illustrates a general characteristic of the Chinese labour market.

Mr. Arno Pearse, in his report compiled in 1929 for

the International Federation of Master Cotton Spinners' and Manufacturers' Associations, drew a contrast between Chinese and Japanese labour. He emphasized the crudeness, illiteracy, and absence of a natural sense of cleanliness and neatness (together, it may be added, with an ingrained lack of discipline) which, in his opinion, marked the former in comparison with the latter. He proceeded, however, to quote the statements of owners of Japanese mills in China to the effect that Chinese workmen are very educable and that, after training in modern factory methods, they prove themselves little inferior to the better-educated Japanese mill-hands. This potential efficiency of the Chinese worker, male and female, receives general corroboration, but recent Chinese researches into wages and standards of living indicate that in present conditions they are limited as to efficiency by the extremely low level of these wages and standards which seriously impair the average worker's capacity, being hardly sufficient to maintain a normal state of vitality. The result—as pointed out by Dr. Ta Chen, Professor of Sociology at the Tsing Hua University—is a vicious circle; low wages depress output and this again holds down wages. Other writers rate Chinese industrial wages as being at a 'bare subsistence' level.<sup>1</sup> The position is made worse, from the purely industrial if not from the wider social point of view, by the traditional 'family system', which results in the distribution of workers' earnings among a large circle of relatives. The effect of this is well illustrated by an example given by Dr. H. D. Fong in the *Nankai Social and Economic Quarterly* for January 1937.<sup>2</sup>

'One large employer of a highly skilled class of labour [he writes], not long ago, was moved by the obvious physical inefficiency of many of his employees and the large incidence of sickness among them to raise wages of his own accord. The only result, as he was able to discern not long afterwards, was that each of these men was now supporting an even larger number of relatives than a person of his position was expected before to look after.'

<sup>1</sup> See L. K. Tao, *Standards of Living among Chinese*, I.P.R. Conference Papers, 1931.

<sup>2</sup> p. 924.



Money wages in Chinese spinning and weaving mills—where the hours of work are from 11 to 12 hours for seven days in the week, special holidays excepted—are extremely low, averaging under 10 Chinese cents per hour. Average monthly wages, as assessed through an inquiry covering twenty-one separate industries, amounted to \$17 for men, \$10.60 for women. These figures are sufficient to show that, even when supplemented by such bonuses, social services, and allowances in kind as the factory hand enjoys, the Chinese workman stands near the bottom of the scale for wage-earners in any part of the world. As regards these supplementary payments, the giving of bonuses especially at the New Year is an accepted practice in China and adds an appreciable fraction to wages; social services, on the other hand, hardly exist in normal conditions in Chinese factories on a scale sufficient to affect the question of labour costs, though special educational facilities have of late years been introduced. Allowances in kind in the case of the cotton industry include usually the provision of lodgings at nominal rents and cheap facilities for meals. Balancing wages against output in China and Japan, Mr. Pearce suggested in 1929 that while individual wages in China were about one-half of what they were in Japan, individual efficiency may be 20–50 per cent. lower.<sup>1</sup> Dr. H. D. Fong,<sup>2</sup> comparing efficiency as between Chinese- and Japanese-owned cotton mills in China in 1930, gives the following figures based on investigations covering from 40 to 70 mills:

	<i>All mills</i>	<i>Chinese</i>	<i>Japanese</i>
1. Spindles per worker . . . .	19	16	24
2. Looms per worker . . . .	0.73	0.58	1.10
3. Yarn output per worker per year (bales) . . . . .	10.70	9.855	11.95
4. Cloth output per worker per year (pieces) . . . . .	414	261	786

<sup>1</sup> *Japan and China Cotton Industry Report*, p. 150.

<sup>2</sup> *Cotton Industry and Trade in China* (Nankai University), vol. i, p. 94.



Since 1930 the productivity and labour efficiency in the Chinese cotton mills appears to have steadily increased, workers' proficiency, as measured merely by the number of spindles per worker, having advanced at a rate indicated by the following index table,<sup>1</sup> where the year 1933 is taken as the base of calculation:

INCREASE IN LABOUR EFFICIENCY IN CHINESE-OWNED  
COTTON MILLS, 1933-5

	<i>Mills in Shanghai</i>	<i>Mills in Other Places</i>
1933	100.00	100.00
1934	132.81	118.98
1935	146.46	128.46

Workers' efficiency in the mills controlled by the Japan Cotton Spinners' Association was given in 1934 in the *Far Eastern Social Information* as follows: 54 spindles per worker; 2.33 looms; 16 bales; 1,700 pieces. We must be cautious in comparing these with the Chinese figures owing to possible differences in methods of calculation, but they seem to indicate a wide difference in 'per worker' efficiency between the mills in Japan and in China, especially in the weaving section, where the difference may, however, largely be accounted for by the use in Japan of automatic looms.

A valuable comment upon the relationship which exists between low wages and the efficiency not only of the worker, but of industrial organization, is provided in the article by Dr. H. D. Fong in the *Nankai Social and Economic Quarterly* for January 1937 already quoted. He writes:

'The general condition of a severe struggle for livelihood among almost all classes which characterizes the period in which modern industry takes its start in China also may be named as one of the causes of its defective organization. Where labor is a large element in the cost of production—that is, where other charges, such as interest and depreciation, are moderate in comparison with the wage bill—there is a margin within which new forms and methods of industrial management can be tried out. Without too great a

<sup>1</sup> Ting, *Recent Developments in China's Cotton Industry*.

dislocation in the total labor cost, it is possible to substitute skilled for unskilled labor, or the reverse, to reduce labor by the introduction of labor-saving devices, and so forth. Where, however, the proportion of labor cost in the total cost of production is small, there is no flexible margin, and the established mode of operations tends to go on because the employer dare not experiment. In China, every favorable opportunity, such as the decrease of foreign imports during the World War, has at once led to cut-throat competition, all competitors operating with about the same major costs, including a wage cost at or below subsistence level for the workers. There was neither the internal flexibility of costs which permits management to shift costs from one item to another, nor was there a margin of financial resources for any of the host of competing entrepreneurs which would enable them to place their operations on a much larger scale than those of their competitors and thus defeat them. A single blow at times could push all of these enterprises into a corner, whether it was a new competitor from without, or an absorption of one or more of the competing enterprises by a newcomer, usually a foreigner, with capital enough to install equipment that would cut down costs below the level at which these men could produce and come out even.<sup>1</sup>

Wages and costs of living in China, though less subject to fluctuations, especially during the world depression, than in most industrial countries, have yet varied considerably. A cost-of-living index compiled by the Chinese National Tariff Commission shows the following broad movements over a period of five years:

	<i>Total cost of living</i>	<i>Food only</i>	<i>Clothing only</i>
End of 1926 . . .	100	100	100
End of 1931 . . .	125.9	107	108
End of 1933 . . .	103.2	83	87

Since 1933 prices have risen substantially and from then till the end of 1936 the index figures (for Tientsin only) increased as follows: total cost of living 22 per cent., food 34 per cent.; clothing, however, dropped by 6 per cent.<sup>2</sup>

<sup>1</sup> pp. 925-6.

<sup>2</sup> Figures derived from tables in the *Nankai Social and Economic Quarterly* for Jan. 1937.

The standard of living among the Chinese masses as a whole was considered by Sir Arthur Salter to be only half as high as among the peasants of India. The comparison of standard is notoriously difficult, but it can safely be asserted that the Chinese standard, including that of workers in industry, is, as has already been said of their wages, situated near the bottom of the world scale. The conditions generally in industrial labour in China were discussed at the Conference of the Institute of Pacific Relations held at Shanghai in 1931, and the result was summed up as follows in the printed Conference proceedings:<sup>1</sup>

‘Many competent observers report to the effect that the conditions of industrial workers in most of China are with few exceptions bad, and in many cases atrocious, even by comparison with other Asiatic countries. Not many persons claim that the Chinese urban industrial worker has reaped any of the benefits which ought to flow from the introduction of modern industrial processes. When allowance is made for the higher cost of living in the cities, for the unwonted rigor of factory discipline, and for the risk of industrial accidents and disease, there is little to suggest that the factory labourer fares better than his peasant brother. There is, indeed, definite evidence that he fares worse than the average craft worker.’

Factory labour is recruited for the most part straight from the country-side. According to an authoritative article on the ‘Regulation of Industrial Conditions in Shanghai’ printed in *Oriental Affairs* for May 1934, many of the Shanghai mills obtain their operatives through labour contractors who make themselves responsible for the supply and exercise authority over the workers. The contractors, who often search for recruits in famine-devastated areas, pay out money for initial expenses, travelling, advances to the parents of juvenile workers, &c., and recoup themselves at high rates of interest from the subsequent earnings of the workers, who are moreover forced to accept the lodging and food which the contractors supply. The result is described as being, in some cases, little removed from slavery. These abuses are found in an

<sup>1</sup> See *Problems of the Pacific*, 1931, part ii, chapter v, p. 153.

extreme form in the case of the Chinese mines, particularly the tin-mines of Yunnan, where the inhuman treatment of workers, as related from time to time by outside observers, is almost unbelievable—comparable only with the conditions which historians describe as having existed in the silver-mines of Laurium in classical times. Even in the coal-mines in Shansi miners are known to 'work for twelve hours a day at a wage of 10 cents and to have been doing so for fifteen and twenty years in individual cases without ever getting away'.<sup>1</sup> The necessity, sooner or later, of abolishing what is virtually slave labour is a factor to take into account in considering what part of China's mineral deposits is capable of being worked on an economic basis. This contract system is stated, however, by Chinese investigators to be on the decline.

As regards the composition of Chinese industrial labour, calculations of the proportion of female labour vary from 45 per cent. to 60 per cent. covering all industries, while child workers are estimated to be about 6 per cent.<sup>2</sup> The proportion of female and child labour is particularly high in the textile industries. No dependable index of industrial occupation among the Chinese is, unfortunately, available. Figures published by the Nanking Ministry of Industry cover only nine of the more highly industrialized provinces and omit the important centre Tientsin. The total number of 'factory workers' in the nine provinces is given as 1,204,000, including, of course, workers in small workshops. The distribution of these among industries provides a certain guide to the relative development of the various industries concerned. Textile factories as a whole employ 47 per cent., while cotton-spinning alone employs 17 per cent., and cotton-weaving 9 per cent., the silk-reeling industry accounting for the greater part of the

<sup>1</sup> Dr. H. D. Fong in *Nankai Social and Economic Quarterly* for Jan. 1937, p. 958.

<sup>2</sup> See C. L. Nieh, *China's Industrial Development*, quoting investigations by the Chinese Ministry of Industry; also the paper prepared for I.P.R. Conference 1933 on the Cotton Industries of Lancashire and of the East by the Royal Institute of International Affairs

remainder. No other single industry represented in the Ministry's occupational table shows a percentage exceeding 5 per cent., tobacco manufacture and printing being the next in order of importance.

In spite of the transient nature of most of Chinese industrial labour, the labour union movement is well established and unions exist in the majority of the principal industries. The movement flourished during the period around 1925 and 1926 when Russian communist influence was prevalent in China, but in more recent years its advance appears to have been slow and it would appear that effective union membership applies to less than half the total number of workers in factories employing 30 or more.<sup>1</sup> Organized strikes are common. A census of industrial strikes and lock-outs in China in 1935 gave the number as 1,932 strikes and 9 lock-outs, approximately one-quarter having occurred at Shanghai. The 300 industrial disputes recorded as having taken place during the year are attributed to the following causes: employment conditions 60 per cent., wages 40 per cent. In China the strike weapon has proved moderately effective in obtaining rises of wages and improvements in working conditions.

To sum up what has been written on labour, the supply is inexhaustible and the quality potentially high according to Eastern standards. Individual efficiency in present conditions is low owing to a general lack of training and supervision and to a depressed standard of existence consequent on low wages. Labour is mostly 'short term', and there is but a very small class of regular industrial workers. Chinese factory operatives show under present conditions a proneness to resort to strikes and to be readily influenced by union leaders and political agitators. In factory conditions and general welfare of workers, where there is much ground to be made up, progress is counteracted by certain features of custom and tradition, by the lack of trained Government officials, and by the difficulties of co-ordinating action between Chinese and foreign authorities.

<sup>1</sup> *China Year Book*, 1934, pp. 247-8.

We will now leave the subject of labour to turn our attention to factors bearing somewhat less directly on industrial development.

(ii) FINANCE

The situation in regard to Chinese currency, which occupied several pages of the first edition of this book, has in the meantime undergone a radical change which, from the point of view of Chinese industrial development, has deprived it of the importance which it had in 1935. In October of that year the Chinese Government introduced a currency reform law which has broken the link between Chinese currency and silver and substituted a 'managed' system which, in effect, stabilized the currency with those of the 'gold-block' countries. Till early in 1938 the exchange rate of the Chinese dollar remained at a level relatively constant with the pound sterling and the U.S. dollar.

Finance is a particularly crucial factor in industrial development in China. The science of banking is older in China than in most of the rest of the world, and when the country entered the era of modern industry, it already possessed in the old 'native' banks the rudiments of an efficient banking system. On this foundation there has arisen an up-to-date structure of 'foreign-style' banks concentrated mainly in Shanghai. The management of the leading 'foreign-style' banks is universally recognized as being highly able and skilful in adaptation to modern requirements. The commercial banks, led by the Bank of China, have shown themselves possessed of substantial reserves of strength in times of financial crisis, although it is true that, as large creditors of the central Government, their position is at all times uncomfortably dependent on the political situation.

In spite of the growth of a modern banking system, the supply of capital for the use and development of industry has remained very restricted. The idea of investment in joint-stock companies is still unfamiliar to the great majority of the Chinese public, and interest rates are

excessively high. This is largely on account of the borrowing activities of the Government, whose requirements have monopolized the markets, the effective yield on the better-secured Government loans being normally in the neighbourhood of 8 per cent. During the world depression the impoverishment of the wealthy Chinese colonies overseas placed a prolonged check on a fruitful source of investment funds. The position is changing, it is true, and the leading Chinese banks have been making determined efforts to infuse money into industry. Dr. H. D. Fong, writing on 'Industrial Capital in China in 1936',<sup>1</sup> distinguishes the following classes of Chinese capitalists: the officials, who, having acquired wealth by virtue of the opportunities which official position has provided in the past in China, 'played an important part in the beginnings of Chinese industrialization during the last generation'; the *compradores*, who with the capital obtained in working with foreign firms have financed, either individually or with the help of independent firms set up by themselves, a large number of small factories and have been 'the pioneers in many industrial efforts in the port cities'; the emigrants and returned emigrants who, amassing fortunes overseas, have invested it in China partly in industrial enterprises, again chiefly in the foreign concessions and settlements and particularly in the rubber industry; and finally the banks, which, however, as Dr. Fong points out, have tended to use their funds for providing working capital for well-established concerns rather than risk it in assisting industrial development in the experimental stages.

### (iii) TRANSPORTATION

More and better communications are usually ranked as China's chief economic need. In so far as industry depends on the transportation of fuel and raw material the existing railway system and coastal and river services are, so far as they go, well adapted to this purpose. The chief manufacturing centres are located at points on the

<sup>1</sup> *Nankai Social and Economic Quarterly*, April 1936.



China coast and on the central Yangtze—particularly at or near Tientsin, Tsingtao, Shanghai, Hankow, and Canton. The principal active coal-fields lie near the coast in the north-east, where the Kailan Mining Administration—a Sino-British-Belgian company—owns one of the largest coal workings in the world, and along the Peking-Hankow and Hankow-Canton railways. Iron ore is mainly produced in the neighbourhood of Hankow, and the most important cotton-growing districts have grown up in railway-served areas in Hopei in the north, in Shantung, around Shanghai, and in the Hankow region. These industrial centres for the most part are linked to the producing areas by rail and steamer routes, and the main hindrances to exploitation consist perhaps less in the actual lack of physical communications than in the check on the movement of goods due to excessive transportation taxes and similar 'administrative' obstacles. To quote a Chinese writer,

'the railway system of China, because of the long history of civil strife and usurpation of power by sectional authorities, is saddled with a tradition of corruption which leaves the shipper of small quantities of goods, more especially, exposed to exceptional hazards'<sup>1</sup>

It is largely these handicaps upon the internal movement of produce which explains the anomaly of China's being such a large importer of foodstuffs from foreign countries, the flour mills at the seaports finding it often cheaper to obtain wheat from America or Australia than from the producing districts in the interior of China.

The handicap imposed by the shortage of railways and roads is more in evidence in relation to the distribution of factory products in the interior markets. Further, by restricting the general exchange of goods, it is a serious factor in keeping consumptive power at a low level. The very exiguous system of railways which China possesses was till the present conflict being steadily extended, but

<sup>1</sup> Dr. H. D. Fong, in *Nankai Social and Economic Quarterly*, Jan. 1937, p. 938. Dr. Fong here cites as his authority Cheng Lin, *The Chinese Railways* (Shanghai, 1935).



progress is limited both by internal conditions and by the lack of capital for development. Imported capital is essential, but this has been difficult to procure, since, owing to past defaults, the Chinese Government's credit stood for many years, as regards railway loans, at an almost prohibitively low level. A marked improvement, however, became apparent during the last few years, during which the Chinese Government resumed payments on a number of railway loans as the result of compromise arrangements entered into with the foreign bondholders, who were found ready to cut their losses.

In the building of roads (there were 85,000 kilometres in 1935 but only a small part surfaced) there has been rapid progress, assisted by the efforts of the National Economic Council with technical assistance from the League of Nations. The construction of thousands of miles of roadways (although these are by no means an effectual substitute for railways) has opened up new districts in most provinces of China to mechanical transport wherever local taxation has not been absolutely prohibitive. It must, however, be mentioned that many of the new highways of China have been found to be serving mainly for passenger and military transportation and only to a minor degree for the movement of merchandise.

#### (iv) RAW-MATERIAL RESOURCES

China is better placed than Japan in regard to the proportion of available domestic supplies of fuel and raw materials to the present needs of industry. How far she possesses the reserves necessary to support a substantial expansion of her industries is another, and a very conjectural, question, since the extent of her resources is by no means accurately known and her capacity to increase her output of agricultural products, such as silk and cotton, depends on political factors which are at present quite incalculable.

Basing ourselves upon the latest and most generally accepted estimate of production and reserves, we can, however, form a broad idea of China's present position

in comparison with other Pacific countries and in relation to world figures.

In regard to fuel, it has to be noted that China's dependence upon domestic supplies has hitherto been lessened by the fact that her factories chiefly exist at seaports where foreign coal can be easily and cheaply imported. The tendency in recent years has been, however, for Chinese factories to locate themselves in the interior of the country, where native coal resources are of prime importance for development. China's position in these resources is not unfavourable. She is on balance an importer of coal, but the import balance has been small, amounting in 1936 to some 800,000 tons: 1·3 million tons imported against 500,000 tons exported. The total output of the coal-mines of China proper is 17–20 million tons a year, which compares as follows with the figures<sup>1</sup> of other 'Pacific' countries:

Japan and Korea . . . . .	38,000,000 tons (approx.)
Manchuria . . . . .	11,000,000 tons „
Canada . . . . .	12,000,000 tons „
U.S.A. . . . .	371,000,000 tons „

Of the total world production China's share is between 1 and 2 per cent. At the present time only about one-third of the output is absorbed by manufacturing industries, the greater amount being employed for domestic purposes, while 8 per cent. is exported. Exports go mostly to Japan and Formosa, imports being derived mainly from Japan and Manchuria.

Most of the coal is bituminous though there are also considerable anthracite deposits; the quantity of lignite is almost negligible. From the metallurgical point of view a fair proportion of the coal is of a useful coking quality, particularly that derived from the large Kaip'ing coal-fields in the north-east, operated by the Kailan Mining Administration, and from the Shansi and Shantung workings.

Domestic consumption is not more than 25 per cent. in excess of output, and for her present requirements China is fairly well provided with coal from her own fields.

<sup>1</sup> Figures for 1934 from Imperial Institute Statistical Summary, 1937.

Her reserves have been variously estimated. The safest estimate to accept is that of the Chinese Geological Survey, which puts the Chinese deposits at about 248,000 million tons. This figure places her third among the countries of the world, after the U.S.A. and Canada. By far the greater part of the deposits lies in North China, one-half being in Shansi Province and a further one-quarter in Shensi. It may be of interest to note that this estimate of China's coal resources is about thirty-five times that of the estimated reserves of Manchuria, and about fifteen times that of Japan.

The petroleum surveys of China have shown, up to the present, an absence of any considerable workable deposits in accessible areas. According to the chief geologist of a large American oil company, China's petroleum resources 'are probably less than 1 per cent. of those of the United States'.<sup>1</sup> Hydro-electric developments of any great magnitude lie too far in the future to be taken into account in considering China's industrial prospects within the next decade or so. Immense schemes for harnessing the power of the Yangtze have, it is true, been propounded by the Chinese Government, but the difficulty attending the financing of such an enterprise places it beyond the limits of practicability for a long time to come.

Of the principal metals required for industry China is for present needs fairly well provided. Annual production of iron ore (Manchuria being excepted) amounts to about 1 or 1½ million long tons—about 1 per cent. of world output—some 800,000 tons coming from the Yangtze Valley. Comparing this with the output of neighbouring territories, Japan's annual output (Korea included) is about 1 million tons and Manchuria's approximately the same. A large proportion of the ore is exported, the latest export figures being 800,000 tons in 1934 and 1,300,000 in 1935 and 1936; the export is almost entirely to Japan. While China's iron-ore production thus compares well with her neighbours, it must, to be seen

<sup>1</sup> See the *Annals of the American Academy of Political and Social Science*, Nov. 1930, p. 122.

in its true proportions, be related to world production, of which it amounts to not more than 1 per cent., and barely one-twentieth of the production of the U.S.A. The Manchurian production of iron ore, as indicated above, is now equal to about 75 per cent. of the Chinese.

Reserves (Manchuria being again omitted) have been estimated by the Geological Survey of China in 1932 at about 250 million tons, of which nearly 100 million tons are situated in Chahar Province on the border of Manchukuo. Mr. H. F. Bain, a leading authority on Chinese mineral resources, comments upon these figures:

‘Her [China’s] iron-ore resources must be termed very modest, or even very scant, when her potentialities of industrial development are taken into consideration. By way of illustration it may be pointed out that the total quantity of iron ore, both actual and potential, would be consumed by the iron industry of the U.S.A. within less than nine years.’<sup>1</sup>

China’s manufacture of raw iron is at present extremely small, her output of pig-iron being barely 100,000 tons a year, well under 1 per cent. of world output. With the opening up at Hankow of large ironworks built with Japanese capital soon after the Great War, the production of iron appeared to be on the point of a great development. The works, however, became almost inoperative and the output of Chinese iron in China returned to a low level, actually declining by some 30 per cent. between 1920 and 1928. Steel production is negligible, the only plants being the Yangtze Engineering Works, the Hankow and Yangchuen Smelting Works, and two or three small Bessemer furnaces. Meanwhile the present Government of China has been making determined efforts to build up a steel and iron industry, and negotiations for this purpose with foreign interests have been on hand on several occasions during the last few years. In the spring of 1937 an agreement was made with German interests for the erection of a large iron and steel works in Central Hunan. It may be added that Germany has become in the course of the last

<sup>1</sup> *The Ores and Industries of the Far East*, p. 84.

two or three years China's chief supplier of iron and steel, with Great Britain ranking next.

With regard to other metals, China contributes a substantial proportion of the world production of tin, antimony, tungsten, and manganese. For industrial purpose, however, the tin produced by the mines of Yunnan is of less account to China inasmuch as the mines are divorced geographically from her manufacturing centres, most of the tin being shipped abroad by way of French Indo-China.

Prospectors have reported extensive oil-bearing strata in North and West China, but they have not been sufficiently tested to enable any judgement to be formed of the amount of the workable deposits.

Passing to agricultural products, the most important is, of course, cotton. Of the quality of Chinese cotton the British Cotton Mission to the Far East in 1931 wrote that it possesses many desirable characteristics, that, though the staple is mostly very short, the fibre is hard, strong, and beautifully white, that it is well ginned but habitually adulterated with sand and water. The Mission considered that with only a slight improvement in length Chinese cotton would be readily saleable in Lancashire; the bulk was, however, suitable only for counts below 16 so that for higher counts a proportion of Indian or American cotton is needed. With an output in an average year of something over 1,000 million pounds, China has been providing between 5 and 10 per cent. of the world production of cotton. The year 1936, however, showed a great expansion both of the area planted with cotton and of the cotton crop, which was double that of the previous year and amounted to 1,870 million pounds or 12.4 per cent. of the estimated world's output for that year. The native crop, distributed over eleven of the eighteen provinces, though mainly grouped in the Yangtze and Yellow River basins, supplies about 75 per cent. of Chinese domestic requirements, the balance of which is imported, 20 per cent. from India and the remainder from the U.S.A. and Egypt. Simultaneously with this import there is an export

of Chinese cotton (60 per cent. to Japan) which accounts for 1·7 per cent. of world exports.<sup>1</sup> Expert opinion inclines to the view that China is capable of supplying her present requirements of raw cotton in full besides greatly raising the quality by easily feasible improvements in methods of cultivation, especially in the selection of seed. It is held that Government action in the field of education and research can go far to produce this result, and experiments in this direction have occupied closely the attention of the National Economic Council.

The north-western pasture lands bordering on Mongolia yield large quantities of wool, most of which goes to Tientsin for export abroad. It is impossible to furnish any reliable estimate of annual production, but the export trade in sheep's wool amounted in 1936 to 187,000 quintals (21 million pounds) and was valued at \$15 million. If an estimate, made a few years ago and based on a census of the total number of sheep, which placed production at 35 million pounds, is anything like correct, the Chinese output is about 5 per cent. of the Australian output. In this case it is clear that China's domestic supplies of wool could support a very considerable development of the wool-weaving industry which, under Government auspices, has lately made a start. The quality of the wool bears no comparison, of course, with that produced in Australia, the import of which into China has in the last few years—as was shown in the previous chapter—shown a rising tendency.

#### (V) CHINESE AND FOREIGN-OWNED FACTORIES

We now pass to the features of industry in China which were reserved to the last as involving the making of a distinction between the Chinese and foreign-owned classes of factories. The mention of the latter raises first the question of foreign investment in China, and it may be well to interpolate here a few facts concerning this.

The explanation of the large foreign element in China's modern industrial development lies in the opportunity

<sup>1</sup> S. M. Djang, *China as a Producer of Raw Materials*, 1933.

afforded of uniting foreign enterprise, experience, and efficiency with abnormally cheap labour in conditions which assure to the *entrepreneurs* the special advantages attached to the treaty port system, including, hitherto, low rates of taxation. The treaty ports, and Shanghai in particular, have been favoured as industrial centres by geographical position, by the inflow of Chinese population and wealth seeking security, and the other advantages of a stable, progressive government, and by the presence of foreign merchant communities which have created trading facilities in banking, shipping, insurance, &c. In fairly recent years a further inducement to found foreign factories in China has come from the rise in Chinese import duties and the consequent advantage of 'getting inside the tariff wall'.

Research into foreign investment in China carried out under the auspices of the Institute of Pacific Relations by Dr. C. F. Remer, Professor of Economics at the University of Michigan<sup>1</sup> (who emphasizes, however, that his figures are far from final), has provided a rough estimate of the size of foreign investment in China and in industrial development in particular.

The results may be stated as follows:

	<i>U.S. dollars (at 1932 parity)</i>	
(a) Total foreign investment in China	3,242 million	
(b) Total foreign business investment in China . . . . .	2,531	„ (being 78% of (a))
(c) Total foreign manufacturing investment in China . . . . .	376	„ (being 15% of (b))

The ratio of (a) to (b) had nearly doubled in the period from 1914 to 1931.

These figures comprise all foreign nations and the whole of China as it was in 1931. Limiting ourselves to the China of to-day, i.e. without the inclusion of Manchuria, and taking the three leading investing nations only (the share of the rest being relatively insignificant), we find the figure of U.S. \$376 million given above under (c) reduced

<sup>1</sup> See his *Foreign Investment in China*, 1933.

to U.S. \$318 million. The latter sum is composed as follows:

	<i>U.S. dollars</i>
Great Britain . . . . .	173 million (54% of total)
Japan . . . . .	125 „ (40% of total)
U.S.A. . . . .	20 „ (6% of total)

The British investment is of a general character, including especially cotton mills and tobacco; the Japanese is in textiles to the extent of over 90 per cent.; the American investment is largely in carpet manufacture.

Foreign manufacturing enterprise in China is concentrated to a major extent in the cotton textile industry, where Japan's investment alone is at the present time reckoned to be approximately double China's investment in her own mills.<sup>1</sup> In dealing with foreign factories we shall confine ourselves to the cotton mills, which for the most part are located in Shanghai, though Tientsin and Tsingtao contain also a number of foreign mills.

The following table based upon the 1933 cotton-mill statistics given early in this section of the book will serve to present a general picture of the relative importance of the foreign mills in China:

	<i>Chinese</i>	<i>Japanese</i>	<i>British</i>	<i>Total</i>
No. of mills . . . . .	89	41	3	133
No. of spindles (thousands)	2,600 (57%)	1,800 (39%)	180 (4%)	4,580
No. of looms . . . . .	19,000 (48%)	17,000 (44%)	3,000 (8%)	39,000
No. of workers . . . . .	180,000 (74%)	64,000 (21%)	13,000 (5%)	257,000

The figures in this table show that the average size of mills of the three categories was approximately as follows: Chinese 30,000 spindles, Japanese 45,000 spindles, British 60,000 spindles. In the case of the Chinese mills, one-half of the number had actually less than 25,000

<sup>1</sup> The fact that the Japanese ratio in capital investment in cotton mills is much greater than the Japanese share in the number of mills or spindles (as shown below) is due to the far heavier capitalization per spindle in Japanese mills.



spindles and were, therefore, as Dr. H. D. Fong has remarked, so small as to be 'below the efficiency level'.

It may, at this point, be mentioned that calculations made three years ago by the Chinese Cotton Mill Owners' Association placed 17 per cent. of the Chinese-owned spindles and 23 per cent. of the Japanese-owned in the northern provinces of Hopei, Shantung, and Shansi. Of the 133 mills shown in the 'total' column of the table about 80 were engaged solely in spinning, 2 were for weaving only, the remainder combined both operations.

Figures derived from the *Chinese Economic Journal* for December 1933 may be given to show the relative output of the three classes of mills at that period:

MILL OUTPUT, FOREIGN AND CHINESE

	<i>Chinese</i>	<i>Japanese</i>	<i>British</i>	<i>Total</i>
Yarn (in thousands of bales) .	1,665 (72%)	575 (24%)	9 (5%)	2,332
Cloth (in thousands of yards) .	9,548 (47%)	8,723 (43%)	1,850 (10%)	20,121

It should be noted that the foreign mills produce, generally speaking, finer yarns than the Chinese<sup>1</sup> and that a much larger proportion of their output of cloth is ordinarily ear-marked for export.

Estimates of the capitalization of the different categories of mills are so varied in the methods of calculation, and contradictory in the results, that not even approximate figures can be given with any assurance of accuracy. A statement compiled from data furnished by the Chinese Cotton Mill Owners' Association and quoted by the British Commercial Counsellor at Shanghai in his 1931-3 report on *Trade and Economic Conditions in China* gave the follow-

<sup>1</sup> The following figures are given in the same issue of the *Chinese Economic Journal*:

<i>Counts</i>	<i>Chinese mills</i>	<i>Japanese mills</i>
Below 19	56%	15%
„ 20	27%	48%
, 21	17%	37%

ing rough totals of capitalization when converted into the common denomination of Chinese dollars:

Chinese mills . . . . .	\$192,000,000
Japanese mills . . . . .	\$300,000,000

For the British mills we may take the figure of \$8,250,000 given as the amount of the paid-up capital in the balance sheet of the Ewo Cotton Mills Company, which owns the British mills in Shanghai. In view of the difficulty of obtaining parallel data for the different national groups these figures must be treated, however, with a large degree of caution. In any case account must be taken of the numerous sales of Chinese mills to Japanese purchasers since the date of the estimates given above, which will have very materially increased the Japanese proportion.

The financing of the foreign industrial enterprises established in China is to a considerable extent provided by the local foreign banks. The latter include a number of banks especially constituted for Far Eastern business (of which the Hongkong and Shanghai Banking Corporation is the largest, with balance-sheet reserves amounting to the equivalent of £6½ million), as well as major branches of leading banks in Japan, U.S.A., and other countries. Though primarily concerned with exchange business and the handling of foreign bills of exchange, these banks employ a proportion of their great local resources in industrial enterprise. Increasing co-operation between them and the leading Chinese banks is a possible development of the future, in which case their financial support may, if political conditions permit, become available for the industrial development of Sino-foreign, or even purely Chinese, undertakings. Generally speaking, even in normal conditions the position of foreign enterprises in China in respect to financial facilities is naturally more favourable than that of Chinese enterprises.

A major distinction exists between Chinese and foreign-owned mills in the spheres of organization and management. The Chinese mills—to take their case first—are mostly in private ownership or in the hands of small

companies,<sup>1</sup> and although these companies have formed the combination known as the Chinese Cotton Mill Owners' Association, the latter is little more than a body for the collection of information of interest to the trade and is only a slight check on the individualism of the separate mills. The technique of company finance is but little developed, and Chinese companies are apt to retain the old traditions of family interest and nepotism. The same heritage of tradition shows itself in the handling of their finances, which are seriously weakened by unsound methods such as the custom of dividing up profits as soon as they are earned, leaving no reserves for unprofitable days, and of making no provision for depreciation except when dividends have been paid.

Compared with the foreign mills, the Chinese are less highly powered and the machinery, if not inferior in quality, is at least less efficiently handled. Management suffers from certain inherited traditions of Chinese social life and is, perhaps, the weakest part of the structure. Chinese supervisors are said to lack authority over the workers, whom they are often slow to reprimand for fear of personal reprisals, and one Chinese writer, describing the position as a whole, has gone so far as to say that 'the whole system of management among Chinese mill-owners is usually polluted by ignorance, favouritism, and squeeze'.

The foreign mills are in all these respects on a markedly better footing. A large part of the Japanese mills belong to powerful combines with manufacturing interests in Japan to which they act as 'feeders'. The Naigai Wata Kaisha, the Japan and Shanghai Spinning and Weaving Company, the Dai Nippon Spinning Company, and the Toyo Company are all large concerns having mills in both Japan and China. For buying raw cotton and selling their finished products the Japanese mills have trading arrangements with co-operative organizations in Japan. The British mills, few in number, but with a propor-

<sup>1</sup> Dr. D. K. Lieu, in his *Preliminary Report on Chinese Industry*, analyses 95 Chinese cotton factories as follows: single proprietorships 32, partnerships 31, limited-liability companies 24, others 8.

tionately large output, especially of cloth, as shown by the foregoing table, are under the single control of the Ewo Cotton Mills Company, organized by one of the strongest and oldest-established British firms in China, Messrs. Jardine, Matheson & Co. The financial needs of the foreign firms are, as already indicated, satisfied by their compatriot banks at far easier rates than are available to the Chinese, they conserve their resources to a far greater extent, and they have the advantage of the services of trained and experienced managers.

In conditions of labour there are considerable differences between the two classes of mills. Average output per worker and per spindle is lower in the Chinese mills, as has already been shown. According to Dr. H. D. Fong<sup>1</sup> the spindle output was in 1932 15 per cent. better in the Japanese mills both in spinning and weaving, while the individual worker's output was 21 per cent. higher, the difference being mainly due to better machinery and organization. Although on the average a Japanese mill employs fewer workers, it contains 20 per cent. more spindles and nearly twice the number of looms.

Again, the Chinese mills stand at a disadvantage in the matter of taxes and pecuniary levies of all sorts from which foreigners are protected by their extra-territorial rights. Many are in the interior and these are peculiarly exposed to risks of military interference and political disturbance in general. The inland mills have, however, a certain compensatory advantage in being closer to native supplies of raw cotton and also to their customers, the latter being, in their case, largely the hand-loom workers scattered over the country; moreover, up-country labour is cheaper and is reputed to be more amenable to discipline than that in the treaty ports.

From the many unfavourable parallels between Chinese and foreign-owned cotton enterprises in China and from the very serious depression into which the latter fell towards the end of the depression, some Chinese writers were constrained to draw most pessimistic deductions, which,

<sup>1</sup> In the *Chinese Social and Political Sciences Review*, Oct. 1932.

although to some extent falsified by the recovery which took place in 1936 and the earlier months of 1937, deserve mention as showing how precarious the very existence of the industry has appeared to competent observers during a period of crisis. The following opinion was expressed by Mr. Leonard Wu, a Research Associate in Social Sciences of the Academia Sinica, in the *Far Eastern Survey* during the critical period of 1934-5.

‘Whether the Chinese mills will be able to survive the present acute crisis is problematical. When, in addition, the superior and more favourable position of the Japanese mills is taken into consideration, the outlook becomes even darker. Mr. Yung Tsung-ching predicted recently the eventual extinction of the Chinese cotton industry. This will happen soon, he said, when the suspended cotton mills are unable to procure more capital from the Chinese public to enable them to resume operations, and when the few surviving mills, in the face of severe Japanese competition, are compelled to admit defeat and close their doors.’<sup>1</sup>

If such a gloomy view was at the time justified it would appear that the prospect for a substantial development of the Chinese-owned cotton industry must depend not only on the political fate of China, but also to a great extent on an improvement of the whole of her economic foundations such as will lead to an increase of demand among the peasant population sufficient to provide a market for the output of all the mills in the country. Foreign-owned mills with their greater dependence on export are obviously less at the mercy of general internal conditions.

<sup>1</sup> *Far Eastern Survey*, vol. iv, no. 1, Jan. 16th, 1935, p. 4.

## CHAPTER III

### CHINA'S INDUSTRIAL FUTURE

THE forecast of future industrial development, difficult enough in the case of Western countries, still more so in the case of Japan and India, is supremely so in the case of China even when considered apart from the enormous uncertainties created by the war at present in progress. This is both because China's industrialization is still in the formative stage and because her economic progress as a whole depends to a more than usual extent on political factors.

We have seen already that China with her abundant and potentially efficient labour, her supplies of certain raw materials, her fund of commercial enterprise, and her geographical advantages, added to the enormous possibilities of her domestic market, offers in a number of respects a favourable soil for the growth of modern industry. At the same time China is feeling—though perhaps less consciously than Japan—the pressure of the increase of population on an already extremely low national standard of living. She is normally a large importer of foodstuffs,<sup>1</sup> but is seriously hindered in her natural role of an exporter of raw commodities by her transport and other internal problems. She is thus thrown back on the necessity of reducing by means of home production her imports of manufactures or of developing factory exports in order to balance her trade.

This impulse towards industrialism has shown results in much theoretical planning and an increased 'industrial-mindedness' among the more enterprising of the Chinese. In recent years actual progress has been retarded by the effects of world depression and by the disturbances caused first by the sudden fall and then by the abrupt rise in the

<sup>1</sup> It must be noted that the need to import foodstuffs arises as much from internal transport difficulties preventing distribution as from actual shortage of production in China itself; also that there is a greater scope than in Japan for increasing yield per acre by using more scientific methods.

value of silver.<sup>1</sup> Between 1933 and 1935 the Chinese-owned factories suffered a definite setback following upon their comparatively rapid advance. The particular retarding factors here mentioned were of a temporary nature and are already a thing of the past. The way might, therefore, have been clear for a vigorous resumption of industrial development in China, had not international complications arisen to postpone, if not to destroy, any such hope. Looking to the future, however, we must ask ourselves whether Chinese industrialization—even under favourable political conditions and free from extraneous hindrances such as a world depression—may not still be faced with certain inherent obstacles of a nature peculiar to itself. In order to answer this question let us see what deductions can be made from the preceding chapters of this section.

Of the prime factor of internal peace and order one can only point out that the trend in China was favourable before the present struggle with Japan began. Whether in the upshot China is to enjoy a degree of order and stability on which to found a large-scale development of industry is, at the present time, utterly unpredictable. Linked with political are 'cultural' factors. China has, as we have seen, a heritage of national characteristics some of which—such as nepotism, 'face-saving', and the system of commission commonly known as 'squeeze'—are incompatible with efficiency and constitute serious handicaps in organization, management, and finance. Their eradication depends, if not on a change of mentality, at least on a breaking away from tradition and in the substitution of 'Western' ideas and practices. This leads us to the question of Sino-foreign co-operation and the importation of a Western element into Chinese industrial enterprises as the only means by which the process can be quickened.

There has been a widespread tendency to regard investment partnership in industry between Chinese and

<sup>1</sup> For the effects of the rise in the price of silver on China's economic situation reference may be made to section I of Sir A. Salter's report to the Chinese Government in his capacity of Economic Adviser.

foreigners as the most promising line of advance for the development of China. The Salter report dealing with economic reconstruction in China advocates that foreign investment should be applied first to the rehabilitation of the railways and then to private enterprise in association with Chinese capital.

‘The best basis [it continues] from both the foreign and the internal point of view will probably prove in future to be the association on equal terms (but not necessarily in equal proportions) of foreign and domestic investment. More and more it is probable that the foreigner will come to regard his best security as consisting in a close association with Chinese investors, whose fortunes are linked with his and who will bear the controlling share of responsibility, and in the credit of the persons undertaking the enterprise and its intrinsic prospects.’<sup>1</sup>

It must be recognized, however, that—even supposing that developments in this direction, in so far as concerns Western countries, are not to be considered as already precluded by the state of affairs which will emerge from the present struggle—there will still be many difficulties to be surmounted before partnership schemes on these lines between Chinese and foreign interests can be widely entertained. Past experiments have not been very encouraging if we except a few cases such as that of the Kailan Mining Administration. The attitude of the Chinese Government, which, as already mentioned, has promulgated laws strongly detrimental to enterprises in which foreigners have a share, has been a definite check on co-operation, while differences in legal concepts and practice and the lack among Chinese financiers and industrialists of men trained to take the ‘long-term’ view of business are serious practical hindrances. For public borrowing of funds much would in any case need to be done in instructing the ordinary investor and correcting the general ignorance which prevails abroad regarding all that concerns China. Nevertheless a not unimportant step was made in June 1934 in the direction of co-operation by the formation in China of the ‘China Development

<sup>1</sup> Op. cit., p. 46.



Finance Corporation' with a capital of ten million dollars (Chinese) for bringing together Chinese and foreign capital to promote industrial development. Since its formation the Corporation has been instrumental in the floating of more than one sterling railway loan from British sources.

To return to China herself, rapid industrial expansion implies the possession of the necessary physical equipment. In this China is definitely deficient. The amount of modern factory plant in the country is insignificant if we exclude cotton-mill machinery and the electrical power installations lately erected in some of the principal towns. The cotton-mill machinery itself—in the Chinese-owned mills, that is—is inferior to what is found in Japan, where war profits were generously applied to the renovation and modernization of plant. At the present time China's imports of machinery and tools (valued at \$60 million in 1936) represent some 6 per cent. of her total imports. Textile machinery alone (of which approximately one-half comes from Great Britain) accounts for about one-fifth of the whole.

An increase in imports of machinery to the extent necessary for large-scale industrial expansion would require large loans or trade credits from abroad. The difficulties of this may well preclude any very rapid expansion, although it is true that, if political conditions in China became once more normal, there would undoubtedly be strong pressure to sell to China a class of goods representing, as the Salter report stresses, 'the most distinctive products of the more advanced industrial countries', the sale of which would offer concrete compensation for losses occasioned by competition in the lighter industries.

The question of marketing Chinese manufactures has only been lightly touched upon hitherto, but cannot be omitted in discussing future prospects. In 1936 China's principal customers in order of importance were the U.S.A. (26 per cent.), Hong Kong (15 per cent.), Japan (15 per cent.), United Kingdom (9 per cent.), Germany (5 per cent.). Taking manufactured goods only, the

Japanese market far transcends all others in importance, this being largely due to the complementary trade in cotton textiles, China furnishing yarn to Japan to be woven in Japanese mills and, in part, exported back to China. The chief consumers of Chinese cotton piece-goods have already been given.<sup>1</sup> Developing industries would, no doubt, find their principal export markets for some time to come in the Eastern hemisphere and competition with the products of Western industry would be chiefly confined to that area. The big market for expanding Chinese industries is, however, obviously China herself. It is upon this market that, as is emphasized in Sir Arthur Salter's report, Chinese industry must mainly base itself. The capacity of this home market<sup>2</sup> consists, as the report points out, of the agricultural population's margin of production over domestic consumption; 'the increase of the production of the average agriculturists remains the fundamental problem of China's economy'. The margin at present shows little sign of increasing; in fact it would appear actually to have dwindled in recent years. Undoubtedly a very great change would occur if China were blessed with peace, and if world prices for agricultural products should be well maintained. This would do much to restore the position of the peasant, and it is the peasant's purchasing power which is probably the greatest factor of all in determining the future rate of development of Chinese industry.

On the subject of the adverse effect which the growth of factories has upon China's agricultural masses the following pertinent passage may usefully be quoted from Dr. D. K. Lieu's *The Growth and Industrialization of Shanghai*:<sup>3</sup>

'Since the products of modern industries are widely marketed in the interior, the handicrafts there are driven out of competition.

<sup>1</sup> See p. 195, above.

<sup>2</sup> The 'home market' no longer, of course, includes the three Manchurian provinces, which formerly consumed one-third of China's factory-produced cotton yarn.

<sup>3</sup> China Council of the Institute of Pacific Relations, 1936, pp. 7-8.

The farmers find it hard to earn extra income from such by-occupations as afforded by the handicrafts and domestic industries. They find it harder to maintain their living on this account. The small rural economic units of this country are thus affected by industrialization in two ways. First, it breaks up our old economic organization, and when the new organization is not yet perfected, the rural districts find it hard to tide over this transitional period. Second, because of the keen competition between modern industries on the one hand, and the handicrafts and domestic industries on the other, the latter are gradually being driven out of existence, thus reducing the income of the farmers as well as the rural districts as a whole. We consider these effects of industrialization as the fundamental causes of rural bankruptcy in China.

‘What, then, is the régime that has taken the place of the old economic organization of thousands of small self-sufficient units? We find that a few industrial cities have sprung up, and are continually growing, in a sense at the expense of the whole country. Instead of having a number of industrial centres well distributed in the different parts of the country, making use of the local natural resources and labour supply, and relieving agriculture of the burden which it has to shoulder for the supply of livelihood to the people, we have only a handful of large cities and a few more smaller ones concentrated mostly along the sea coast, especially in Kiangsu and Chekiang. There are large areas of the country not provided with any industrial centres at all, however small in size. Modern industries do not develop as they should, even in such centrally located cities as Hankow, Chengchow, Kiukiang, etc. Territorially speaking, the industrial development of the country is very much lop-sided.’

In so far as this is a correct view, it would seem that a vicious circle exists, industrialization (in the forms in which it has hitherto developed in China) impoverishing the peasant, whose poverty in turn checks industrial progress.

With regard to the question as to which branches of industry are, in these circumstances, most susceptible of development, we cannot do better than look again at Sir Arthur Salter’s report where he sets out the principles which should, and may be hoped to, inspire industrial policy. These are as follows: (i) the encouragement and extension of industries which can find a sufficient

home market, (ii) the limitation of 'export' duties to those classes of goods in which China has special advantages, (iii) preference for industries requiring a relatively small capital investment, (iv) the initial building of industries based upon China's agricultural production and mineral resources. This would result, the author of the report believes, in the development first of the industries associated with cotton, next, of those associated with silk, finally, and 'most important of all if we group them together', of 'small specialized light industries operating economically in small units, requiring skilled work but not very elaborate or expensive plant'. Later would follow the mineral 'extractive' industries and the industrial processes based upon them, including the production of fertilizers. Most of the heavy industries, the report concludes, 'must probably be considered unsuited for China at her present stage of development'.

So far in this section we have been considering native industrial development from the Chinese standpoint. The question of factories under foreign ownership and control, already one of major account when this book first appeared in 1935, may well, in consequence of Japanese action in China, become of still greater importance. Foreign-owned factories in China form a separate problem, standing as they do to a great extent outside the Chinese economy; it is arguable that in some cases they belong more to the economy of the foreign country whence they derive than to that of China. Even as regards the marketing of their products they are—though this applies to the cotton mills more especially—independent of conditions in the interior of China to the extent to which they cater, as they largely do, for export, the foreign mills contributing probably as much as one-half of the cotton goods exported from China.

The Japanese spinning mills, it has been pointed out, fill the role of feeders to the weaving industry in Japan and help to lower its costs. To this extent they can be ranked by Japan as a national asset. Integration of interest

is only possible, however, for so long as the overseas factories can be restricted to lines of production ancillary to the industries at home. If the former grow in number and increase in importance, they must inevitably develop greater independence and become more difficult to keep as mere appendages to the home industry of Japan. From being helpers they will tend to become competitors. The process has begun in the case of the weaving mills. When this happens, it will become a choice of policy for Japan whether or not to continue to encourage the expansion of overseas factories competing with home factories, especially in the important Chinese market. In other words, we shall see repeated the situation which occurs when colonial enterprise reaches the point of affecting vested interests in the mother-country. It is possible, of course, that Japan, with her marked capacity for co-ordinating business and national policy, might solve the dilemma and find methods of exploiting the advantages of a system which unites Japanese capital and management with Chinese labour<sup>1</sup> without thereby doing damage to national interests regarded as a whole. The nature of such an arrangement can only be conjectural, but it may be assumed that it would broadly follow the lines of using the factories in China for supplying China with relatively low-grade manufactures and allowing the export industries in Japan to specialize in higher classes of goods more adapted to wealthier overseas markets.

Gathering into a few sentences the conclusions of the preceding chapters on China, we may say that the prospects of Chinese industrial development—leaving aside politics—rest on certain conditions which may be summarized thus. Of basic resources China is blessed with a fair share, possessing as she does an abundance of cheap labour, good or moderate supplies of the more essential raw materials, and an undoubted command of native

<sup>1</sup> Provided always that, after peace has been restored and industrial development made possible, Sino-Japanese relations will be on such a footing as to make working co-operation between the nationals of the two countries possible.

enterprise and business aptitude. Of what may be termed 'the will to industrialize' she gives evident proof, though her impulses may not follow the line of the urban concentration of industry typical of the West. As regards the more immediate prerequisites of industrialization—finance, transport, and orderly administration—her possession of these is more potential than actual; her financial resources need supplementation from abroad, her transport system requires improvements and extension. Of the chief prerequisites of all, peace, order, and stable government, it is obviously impossible in present circumstances to enter into discussion.

### NOTE

The last part of this chapter in the original edition was occupied by a discussion of the alternative lines for Chinese industrial expansion as they presented themselves at the time of writing, the respective probability of each alternative depending—as it was pointed out—mainly upon political developments in China, especially in regard to China's relations with Japan. The conflict between these two nations which has now arisen changes so completely the prospect and renders the future so impenetrable that it has seemed best to arrest the chapter at this point.

The interruption which the war has brought to China's industrial development is peculiarly tragic for that country in that the year in which it has occurred had given promise, up to the time of the outbreak, of marking the beginning of widespread industrial recovery, the first half of 1937 having shown a remarkable improvement over the corresponding period of the previous year, as exemplified by a rise of 69 per cent. in power consumption, 27 per cent. in the production of cotton yarn, 42 per cent. in that of cement, with an increase in railway earnings reckoned as between 20 and 40 per cent., and, finally, a 45 per cent. expansion of exports and a 32 per cent. expansion of imports.<sup>1</sup>

<sup>1</sup> Data extracted from the *Far Eastern Survey*, Sept. 29th, 1937.



# IV INDIA





## CHAPTER I

### BRIEF HISTORY OF INDIAN INDUSTRIALIZATION

**B**EFORE intimate contact was established between East and West, the economic situation was very similar in India, China, and Japan. In all three countries there were ancient races, 'civilizations, and cultures with economic and social systems based on status and custom. There were old-established industries, organized on traditional lines, which had been in the industrial vanguard but were left behind with the onset of the industrial revolution in the West. In the East there was but little idea of development or progress and the 'economic motive' had comparatively little strength.

A distinction, however, between India and the Far East soon manifested itself, in that China and Japan had, as compared with India, a much greater dislike of, and contempt for, the 'Western barbarians', and succeeded in keeping them out much longer. Direct contact between India and the West started earlier partly because of India's greater geographical accessibility, and partly because certain Indian rulers showed a readiness to trade and make treaties with Europeans. Once the latter had obtained a footing in India, the lack of political unity and the conditions of chaos and disorder which followed the break-up of the Mogul Empire made penetration easy. Nevertheless, contact was long confined to commercial relationships and in the main to a few coastal settlements, owing largely to the monopolistic policy enforced by the English East India Company. Not until firstly (partly in 1813 and partly in 1823) the trade monopoly, and secondly (in 1833) the trading powers of the company were removed, did it become possible for any considerable number of private individuals, merchants, planters, &c., to settle in India.

At the beginning of the nineteenth century India's industries still consisted, as for many centuries previously,

of village handicrafts serving purely local needs, and of urban (often artistic) industries serving wider, and to some extent foreign, markets. The most important of the latter were the textile, mineral, and metal industries. The urban industries were organized in guilds, or by middlemen who made advances to the craftsmen and marketed the goods, many of which were of high quality and value, although output and exports were small in quantity by modern standards. The industry in fine woven cottons had enjoyed a market on the African coast, in the islands of the East Indies, and in England itself, but during the eighteenth century the trade with the latter country became steadily reduced by prohibitions on certain goods and the growth of protective duties. By the end of the century the cotton industry had already lost its former European markets, but as yet retained its home and Far Eastern markets.

Throughout the nineteenth century competition from the growing machine industries of the West increased, and the indigenous Indian industries experienced continuous depression. Eventually the Indian cotton industry in competition with Lancashire lost the greater part of its remaining foreign markets for piece-goods, and a substantial part of the home market for both yarns and piece-goods. By the end of the century the hand spinning of cotton in India had very greatly diminished. The metal and mineral industries were also hard hit. Iron-smelting, previously carried on in small works scattered throughout the country, and the associated production of steel goods (mostly for arms and ornament) practically disappeared, whilst the quality of the products of the artistic handicrafts deteriorated. British factory products were not only cheaper than indigenous goods, but also became fashionable among the richer classes. This process, that is the decay of peasant industries, has not, of course, been peculiar to India, but has occurred in all areas affected by the industrial revolution.

The extension of British rule in India and the economic policy of the Government aggravated these tendencies.

Attempts to assist or protect the decaying indigenous industries hardly existed except on the artistic side. In the earlier days British control in India was still far too incomplete to make practical any general measures of protection for Indian industries, and administrative energy was monopolized by the need of establishing law and order, while at the same time the British authorities in India were under the influence of the *laissez-faire* creed which was taking hold in England.

When later the need for the encouragement of industry became more apparent, being emphasized in the first Famine Commission's report made in the eighties, the Government was slow to awake to its responsibilities in the matter. The result was that the production and export of the classes of goods demanded in the West, such as foodstuffs, raw materials, and plantation products, increased at the expense of the replacement of indigenous by imported manufactures.

The most important factor accelerating these changes was the improvement in transport and communications which took place during the second half of the century. The construction of railways in India (the first line was opened in 1853, and the main network completed by 1900), the improvements in ocean transport, and the opening of the Suez Canal tended to unify the whole country, and to open up the interior, thus enabling both easier penetration of the Indian market by English goods and the large-scale production and export of foodstuffs and raw materials. Another effect was to equalize prices, bringing Indian into line with world prices. Incidentally railways revolutionized the famine problem.<sup>1</sup>

By the end of the nineteenth century India had become a great exporter of rice, wheat, cotton, jute, tea, oil-seeds, &c., and dependent upon imports of manufactures, especially cotton clothing, iron and steel goods, railway plant, and machinery. In the industrial sphere some pro-

<sup>1</sup> Food could now be transported quickly to the afflicted areas, and the problem was transformed from one of life and death to one of the provision of work and relief.

gress had been made, but in limited directions only. Even before the railway era, attempts had been made to establish modern industries (such as cotton mills and ironworks) in India, but these had failed, mainly owing to the absence of adequate transport facilities. The construction of railways removed the worst difficulties. The first successful cotton spinning mill was established in 1853 at Broach (Bombay Presidency); the coal-fields of Bengal and Bihar began to be worked in connexion with the East Indian Railway; jute spinning and weaving mills were established in Calcutta (from 1855 and 1859 respectively); engineering works were set up at railway junctions; and modern ironworks, utilizing coal for smelting, were established at Barakar (Bengal) in 1875. But progress was slow, and, except in the cotton mill industry, both capital and enterprise were mainly supplied from England. The railway net was not yet complete; the infant industries were subject to the competition of untaxed imports; capital, managerial ability, technicians, and skilled labour were scarce, or expensive if imported; manual labour had to be recruited and trained. The situation may be summed up by saying that, although Europeans had been permitted to settle and work in India, they had confined themselves mainly to foreign trade, plantation production, and one or two other types of enterprise, the Government pursued a *laissez-faire* policy, and Indian leaders inclined to stand aloof from economic Westernization, and showed unwillingness to submit themselves to the manual training and the drudgery necessary for effective acquaintance with technical processes. At the same time the Government of India did not, like that of Japan, follow a policy of sending students abroad for technical education.

The contrast with Japan is striking. Although contact with the West and the economic transition only began in that country with the Restoration of 1868, once a start had been made little more than half a century was needed to enable Japan to catch up with the West in the industrial sphere. In Japan the whole energy and resources of the Government and of the former feudal aristocracy lay

behind industrialization; in India the Government left industry severely alone, and for long no Indian industrial leaders appeared. Japan deliberately discarded feudalism and the old attitude towards economic matters; Indian sentiment remained in its old grooves. Japan chose, India merely tolerated Westernization. In Japan patriotism and loyalty to the Emperor reinforced economic developments, whilst the spread of education popularized the new ideals and methods; in India primary education was neglected, and the natural leaders were apt to look askance at materialistic ideals. In Japan State paternalism encouraged individual enterprise, and the strong family and paternal sentiment of the country extended to employers and the State; in India caste and the prevailing Hindu joint family system, whilst providing support for the weak and unsuccessful, hindered individual enterprise owing to the absence of the stimulus either of necessity or personal ambition.

Thus in Japan modern industries, under Japanese control, immediately replaced antiquated types of enterprise, whilst in India there was a definite hiatus between the decay of the indigenous industries and the rise of factories and large-scale concerns, the gap being filled by imports of manufactures. In Japan the Government established and encouraged railways and modern shipping, mining, and manufacturing concerns, and various types of modern banks. In India the Government confined its economic activities to the sphere of public works, e.g. railways, irrigation, and famine relief works, although the great reforms in civil administration eventually had the effect of facilitating economic and commercial progress. Japan borrowed foreign capital, it is true, but she utilized it herself, whereas in India the majority of modern enterprises were financed, controlled, and managed by foreigners.

China for her part has, like India, been largely dependent upon foreign capital and enterprise for railway construction and the promotion of modern industries; but in her case, owing mainly to the lack of a strong central Government, progress has been much slower, and modern

transport facilities are still confined to very limited areas.<sup>1</sup> Broadly speaking one may say that, from the point of view of industrialization, India holds a position half-way between China and Japan.

So far we have considered only nineteenth-century developments. The very factors which revolutionized Indian trade during that century, as regards both volume<sup>2</sup> and nature, bore within them the seeds of developments which in the following century reversed the nineteenth-century trend towards dependence upon exports of primary goods and imports of manufactures.

Towards the end of the century India suffered from a series of devastating famines and other calamities, whilst Government finances were at a low ebb owing to the general poverty and depression, the high cost of administration, and the decline in the gold value of the rupee. After 1900 things took a turn for the better. Harvests improved, the rupee had been stabilized, the price-level rose, the railways began to pay, and taxation could be reduced. This marked the turn of the tide as regards the relative importance of manufactured and primary goods exported, the position and rate of development of industries in India, and the economic policy of the Government. On the one hand the modern, large-scale industries took firm root and began to expand rapidly, whilst at the same time the introduction of peace, order, and a considerable degree of unification called into being a strong nationalist spirit which resented and revolted against the alleged economic domination of India by England. Under this influence arose the 'Swadeshi' movement advocating industrialization. The grant of increasingly representative

<sup>1</sup> There are about 6,700 miles of railways in China, excluding Manchuria, as compared with 43,000 in India.

<sup>2</sup> It is difficult to measure the increase in the volume of trade, but it may be noted that in 1835 (when the present series of trade statistics started) the total value of merchandise imported and exported amounted only to just over £14 million, in 1850 to about £32 million, while the average for the years 1899-1900 to 1903-4 amounted to no less than £139.7 million. This compares with £332 million in 1928-9, and £241.0 million in 1936-7.

parliamentary government, and the wider and clearer recognition of the deplorable condition of the masses, led on to a more constructive economic policy, designed both to stimulate and improve production and to satisfy the wishes of the articulate classes.

Thus contact with the West at last began to affect fundamentally not only civil administration and foreign trade, but also the development, organization, and methods of industrial production in India.

The period preceding the Great War was a period of general prosperity, industrial advance, and trade expansion. By 1913 the cotton, jute, coal, engineering, and plantation industries had become strong and progressive, while mill-made cotton yarn and piece-goods, and jute cloth and gunnies, came to rank among India's chief exports. In 1907 the famous Tata Iron and Steel Company was founded, producing pig-iron at once and steel seven years later. The Tata hydro-electric concerns were started, and began to supply electricity to Bombay mills in 1915, whilst the Burma oil-fields (whose development started in 1891) supplied the Indian Peninsula with a new source of illumination and power.

Then came the War itself, which hit Indian trade hard, but, as in the case also of China, gave a great, though in some cases temporary, stimulus to industry owing to the elimination of competing imports. The effect of the War on Indian trade forms a great contrast to its effect on Japanese trade. Whereas the latter increased over 200 per cent. in value during the War years, the value of Indian trade did not regain the level of 1913 until after the War was over, and the 1913 volume was only regained in 1927-8. Thereafter it rose slightly in 1928-9 and 1929-30, since when it has again fallen far below the pre-war level.

These movements of Indian trade from the War to the present time are shown summarily by the tables on p. 254.

The War revealed both the potentialities and deficiencies of Indian industries. The production of woollen, cotton, metal, and a number of other manufactured goods



was greatly stimulated by both the special war demand and the cutting-off of imports. The Government, too, encouraged industrial production by every means in its

I. TOTAL VALUE OF INDIA'S TRADE IN MERCHANDISE  
(In crores of rupees)<sup>1</sup>

	1913-14	1928-9	1929-30	1932-3	1933-4	1934-5	1935-6	1936-7
Imports . . .	183	253	240	132	115	132	134	125
Exports . . .	244	330	311	132	146	151	160	196
Total . . .	427	583	551	264	261	283	294	321
Net imports of bullion and specie . . .	36	31	23	..	..	..	..	..
Net exports of bullion and specie . . .	..	..	..	65	57	58	36	15

II. QUANTITY (THROUGH REVALUATION) OF INDIA'S TRADE  
IN MERCHANDISE<sup>2</sup>  
(In crores of rupees)<sup>1</sup>

	1913-14	1928-9	1929-30	1932-3	1933-4	1934-5
Imports . . .	183	190	189	162	146	172
Exports . . .	244	260	263	176	209	216
Total . . .	427	450	452	338	355	388

power. But India could not take full advantage of her temporary monopoly, as she depended for plant, machinery, and accessories on imports from abroad. Japan and the United States stepped into the breach. The Japanese established themselves and their goods firmly in India and extended their shipping lines thither, thus preparing the way for the competition in the cotton piece-goods trade between Lancashire, Japan, and India which became a notable feature of the post-war period.

Before examining in more detail the present condition of Indian industry and trade it must be emphasized that, in spite of all these developments, agriculture remains of preponderant importance in India, the numbers occupied

<sup>1</sup> A crore means ten millions, and is written 1,00,00,000. One rupee is at the present time equivalent at par to 1s. 6d. sterling. The figures refer to private merchandise, and exclude re-exports.

<sup>2</sup> These figures measure changes in quantity approximately, being a revaluation of trade on the basis of prices in 1913-14. The series was not continued after 1934-5.

in the indigenous industries still greatly exceeding those in organized industries.

According to the census of 1931, 67·1 per cent. of the total occupied persons are engaged in agriculture, pasture, fishing, and hunting,<sup>1</sup> whilst 10·0 per cent. are occupied in industries of all types. Of the latter number the majority are occupied in indigenous, small-scale industries, and it has been estimated that there were only about three and a half millions (less than 2·3 per cent. of all occupied persons) in organized industrial establishments. There were still in 1931 only one and a half millions employed in factories subject to the Factory Acts.

The numbers employed in the chief organized industries in 1921 and 1933 are given below:

## ORGANIZED INDUSTRIES

	<i>Numbers employed</i>	
	1921	1933
Cotton spinning and weaving mills . . . . .	350,000	428,278
Jute mills . . . . .	287,000	260,565
Collieries . . . . .	181,000	163,173
Railway workshops . . . . .	112,000	111,410
Metal and engineering workshops (including iron and steel works) . . . . .	147,741	130,266
Cotton ginning and pressing . . . . .	83,000	178,419

These six industries, and the tea plantations (which employ more than twice as many persons as the cotton spinning and weaving mills), are the only ones employing over 100,000 persons each. The numbers employed increased up to 1929–30 but fell heavily during the depression. The cotton and jute industries still use the largest labour force.

The cotton mill industry began to expand rapidly from the eighties, mills being erected principally in the Bombay Presidency but also in Madras and many other large centres of population. Despite the removal of all duties

<sup>1</sup> Making allowance for certain changes in census methods the percentage occupied in agriculture has changed but little since 1921 and is almost the same as in 1911.

on cotton imports between 1882 and 1894, temporary set-backs due to plague and drought at the end of the century, and the rise of Japanese competition in India's foreign markets early in the twentieth century,<sup>1</sup> India had by 1914 become the fourth greatest cotton-manufacturing country in the world.<sup>2</sup> Loss in foreign markets was more than compensated by the expansion of the home market and this change in markets was accompanied by a relative increase in the production of finer yarns, and in weaving as compared with spinning.<sup>3</sup> The products of the Indian mills wedged themselves between the imported (Lancashire) and the hand-made goods, obtaining a practical monopoly in the intermediate grades, the better-quality mill goods competing with imports and the inferior types with hand-made products.

The following table illustrates developments in the cotton mill industry since 1900:

THE INDIAN COTTON MILL INDUSTRY<sup>4</sup>

	1 <i>Number of mills</i>	2 <i>Paid-up capital (lakhs of rupees)</i>	3 <i>Looms working</i>	4 <i>Spindles working</i>	5 <i>Numbers employed</i>
1900-1	191	15,80.1 <sup>a</sup>	41,180	5,006,936	172,883
1913-14	264	18,60.6	85,158	5,848,283	260,276
1925-6	303	47,50.0	136,033	7,264,234	373,508
1933-4	344	37,21.3	158,802	7,845,077	384,938
1935-6	..	..	177,935	8,504,406	417,803

<sup>a</sup> 'Capital employed'. 'Paid-up' capital is not given for this year.

<sup>1</sup> As shown elsewhere in this volume, early in the twentieth century Japanese ousted Indian yarn from the Japanese market, and began to compete in the Chinese market also. Indian raw cotton was exported to Japan from 1889. The development of China's own cotton mill industry also affected Indian sales in China.

<sup>2</sup> The first three countries were Great Britain, U.S.A., and Germany.

<sup>3</sup> Mill spinning developed before mill weaving in India, as in other countries (including Japan and China), because relatively little skill and experience is necessary for successful production, whereas cheap labour is of great competitive advantage. Mill weaving has developed later in each important producing country as skill and experience have increased.

<sup>4</sup> Columns 1 and 2 are taken from the Statistical Abstract, and columns 3, 4, and 5 from the Annual Reports of the Mill-Owners' Association.

During the War the industry experienced unparalleled prosperity, but only a few new mills were constructed on account of the difficulty of obtaining machinery and plant. Hence existing mills worked day and night and obtained high profits. The boom continued until the crisis of 1921, and in fact serious depression did not set in until about 1923. Since then the depression of prices and profits, at any rate in the Bombay Presidency, has been practically unrelieved notwithstanding the continual expansion, in the case of India as a whole, of production and sales in the home market and of the introduction and extension of protective tariffs. Exports of yarn and to a lesser extent of piece-goods (as well as imports of both yarn and piece-goods) have declined, the immense increase in output having been absorbed in the home market, but often at unremunerative prices. Thus the great feature of recent years in India has been the regaining of the home market, in great contrast to developments in Japan, where not only have imports been reduced to negligible proportions, but an immense export trade first in yarn and later in piece-goods has arisen, rendering the position of Japan—as an industrial country dependent upon imports of raw materials and exports of manufactures—comparable with that of England.

In concluding this section a short analysis will be given of India's position in world trade. In 1913 she came seventh on the list of trading countries, with 3·6 per cent. of the recorded world trade in merchandise, being surpassed by the United Kingdom, Germany, U.S.A., France, the Netherlands, and Belgium. At this time China came tenth and Japan eleventh on the list.

In 1929 India had risen to sixth place, but with only 3·18 per cent. of the world's trade. At this time the United States, United Kingdom, Germany, France, and Canada were the leading countries, Japan having risen to seventh place, and China being eleventh on the list. In 1936 India had fallen to eighth place, with only 2·70 per cent. of the world's trade, whereas Japan had risen to sixth place, and China had fallen to thirteenth. These latter

figures illustrate clearly both the extraordinary severity of the depression in India and the rapid relative improvement in Japan's position.

The following table shows the principal classes of India's imports and exports in the pre-war and war periods, and for the years since 1930-1:

TRADE IN PRINCIPAL ARTICLES OF MERCHANDISE  
(ON PRIVATE ACCOUNT)

In percentages based on values<sup>1</sup>

IMPORTS

	1909-14 (average)	1914-19 (average)	1930-1	1931-2	1932-3	1933-4	1934-5	1935-6	1936-7 <sup>a</sup>
Cotton manufactures	36	35	15	15	20	15	16	16	14
Iron and Steel . . .	7	6	7	5	4	5	5	5	5
Machinery . . . . .	4	4	9	9	8	11	10	10	12
Sugar . . . . .	9	10	7	5	3	2	2	1	..
Hardware . . . . .	2	2	2	2	2	3	2	2	1
Mineral oil . . . . .	3	3	6	7	5	5	5	4	5
Silk goods . . . . .	3	2	1	2	2	2	2	2	1
Other articles . . . . .	36	38	53	55	56	57	58	60	62

EXPORTS

	1909-14 (average)	1914-19 (average)	1930-1	1931-2	1932-3	1933-4	1934-5	1935-6	1936-7
Jute, raw and manu- factured . . . . .	19	25	20	21	24	22	21	24	22
Cotton, raw and manufactured . . . . .	15	16	24	18	18	21	25	24	25
Food and grains . . . . .	21	17	14	13	12	8	8	7	8
Oil-seeds . . . . .	6	6	8	9	9	9	7	6	9
Tea . . . . .	6	8	11	12	13	13	13	12	10
Hides and skins . . . . .	7	8	2	2	2	3	2	2	2
Other articles . . . . .	26	20	21	25	22	24	24	25	24

<sup>a</sup> Metals and ores, which account for 7.7 per cent. of total imports in 1936-7, are not included in this list.

On the import side this table, and still more the detailed figures, show that a large proportion of India's imports

<sup>1</sup> *Department of Overseas Trade Report on Conditions and Prospects of United Kingdom Trade in India, 1935-6, and Review of the Trade of India, 1936-7.*

are manufactured goods, very miscellaneous in character, thus offering a tempting market for almost every industrial country. The trend of the import trade shows that high-quality miscellaneous manufactures are becoming of increasing importance. The heading 'other articles' forms an increasing proportion of the total, and consists largely of manufactures, including motor-cars and lorries, instruments and apparatus, provisions and oilman's stores, dyes and chemicals. In 1936-7 vehicles (chiefly motor-cars and lorries) formed no less than 5.2 per cent. of India's total imports. On the other hand cotton and iron and steel goods have decreased in importance, owing mainly to increased home production, whilst, owing to the policy of protection, sugar imports have now (1937) been practically eliminated.

India's exports are also heterogeneous in character, and include foodstuffs, raw materials, and manufactures. In the year 1936-7 manufactured jute accounted for 14.2 per cent. of India's exports, but manufactured cotton for only 1.9 per cent. Metals and ores accounted for 4.1 per cent. of the total. Important manufactured articles not given separately in this list are pig-iron, leather goods, woollens, paraffin wax, oil-cake, and shellac. The decline in the relative importance of food grains and of hides and skins is striking, and is counterbalanced mainly by the increased importance of jute goods, raw cotton, oil-seeds, and tea.

## CHAPTER II

### PRESENT CONDITIONS

#### I. THE INDUSTRIAL POLICY OF THE GOVERNMENT

IN order to estimate the competitive position and potentialities of Indian industries it is necessary to examine the main factors and problems affecting large-scale industrial production within the country, and to analyse the condition of the principal modern industries. These questions may be classed under four headings: the industrial policy of the Government; the organization and financing of industries in India; the position of the cotton mill and iron and steel industries; and industrial labour.

During the nineteenth century the policy of the Government of India was, as already mentioned, in principle *laissez-faire*, although in practice the urgency of the famine problem and political and military exigencies led to the adoption of a constructive policy as regards public works. Nothing was done to promote modern industries nor to assist the depressed indigenous industries. The moderate 'revenue' tariff was gradually reduced and finally entirely removed (except for excisable articles) between 1882 and 1894. In 1894 and 1896 a return was made, however, to revenue duties, the general rate being 5 per cent. (with  $3\frac{1}{2}$  per cent. on imported, and a countervailing  $3\frac{1}{2}$  per cent. excise on mill-produced, cotton piece-goods).<sup>1</sup> This tariff remained in force, with minor modifications, until 1916.

Meanwhile a considerable change occurred in the general economic policy of the Government, which under Lord Curzon (1899-1905) began to encourage agricultural improvements and established closer relations between the Government and the commercial and industrial classes,

<sup>1</sup> Imported goods were classified in a series of schedules, to which different rates applied. The largest class, including all goods not mentioned elsewhere, was subject to the 'general rate'; the schedules were rearranged in 1934 on the basis of types of commodities.

marked by the establishment of a special Department of Commerce and Industry in 1905. Lord Curzon's Government favoured the efforts of the Madras Government to assist indigenous industries, such as hand weaving and tanning, and also the establishment of Provincial Departments of Industries, but the Home Government refused to endorse this policy, so that until the war period the assistance given to industry was mainly concerned with the collection of information, a certain amount of research work, and some provision for industrial education and training.

The War revealed clearly Indian industrial deficiencies and potentialities, and a fundamental change took place in economic policy. The Government wished to develop India's industrial resources for war purposes and in order to supply deficiencies created by the cutting-off of European imports. The Government's industrial activities were concentrated in the hands of the Munitions Board, which undertook surveys, research, and in some cases actual production, and also assisted private enterprise in a number of ways. Departments of Industries were established in all the chief provinces. At the same time exports, imports, and railway and ocean transport were rigorously controlled. Meanwhile, in 1916, the Industrial Commission had been appointed. The Report of 1918 concluded that although India's industrial potentialities and resources were great, she had as yet been little affected by the 'march of modern industry', and that in future the Government ought to play a more active part in industrial development. The chief recommendations dealt with improved departmental organization for the encouragement of industries, improvements in technical training and education, reorganization of the scientific staffs of industrial departments, the giving of technical and financial aid to industries, the encouragement of industrial co-operation, and the provision of improved transport facilities. The Report was accepted by the Government, and an Imperial Department of Industries was established in 1921, but the allocation of industrial development as a 'provincial' subject after the Montagu-Chelmsford



Report increased the difficulty of giving effect to many of the recommendations, not all of which have come into force. Financial stringency has, besides, hindered the work of the Provincial Departments, but it is hoped that Provincial Autonomy, inaugurated in April 1937, may lead to greater activity (backed by greater financial resources) in this sphere.

The war conditions resulted also in a complete change of tariff policy. The general level of tariffs began to be raised (at first purely for revenue purposes) in 1916, and in 1922 the 'general rate' was raised to 15 per cent., with higher duties on certain articles, chiefly luxuries. The duty on cotton piece-goods was left at 11 per cent., which—as the excise remained at  $3\frac{1}{2}$  per cent.—provided a degree of protection. A duty of 5 per cent. was imposed on cotton yarns, which had previously been on the free list.<sup>1</sup> Meanwhile 'fiscal autonomy', interpreted to mean non-interference by the Home Government with duties agreed upon by the Government and the Legislature,<sup>2</sup> was granted in 1919, in connexion with the Constitutional Reforms. Eventually a Fiscal Commission was appointed, and in 1922 recommended a policy of 'discriminating protection', in spite of the protests of a minority who demanded unconditional and more far-reaching protection. This policy introduced the principle that claims for protection should be investigated by a Tariff Board, which might recommend protective duties for any Indian industry possessing natural advantages, and likely eventually to be able to produce at a profit without assistance, but unlikely to develop without protection.

The Tariff Board began by considering the steel and related industries, and the duties and bounties recommended were imposed by the Steel Industries (Protection) Act of 1924. Various modifications have since been intro-

<sup>1</sup> The tariff treatment of cotton-goods imports into India is dealt with generally here as part of the Government tariff policy as a whole; it is dealt with more specifically and in greater detail below, pp. 285 et seq.

<sup>2</sup> For a definition of the practical meaning of 'fiscal autonomy' in India see later, pp. 269 et seq.

duced. In 1927 the steel duties were somewhat reduced in pursuance of the Government's policy of withdrawing protection from an industry when it had become established. Preference for British steel goods was at the same time introduced. Recently the whole scheme has been revised, retaining and extending the preferential principle.<sup>1</sup>

Meanwhile the Tariff Board has carried out a series of inquiries into the claims of other industries, and protection has been extended to matches, certain types of paper, cotton piece-goods (in 1930), certain chemicals,<sup>2</sup> sugar, wood-pulp, salt, coal-tubs and wagons, silk and mixed textiles, wire, silver thread and wire, and (for a time) wireless apparatus. Preference for British steel and cotton piece-goods was recommended and adopted in 1927 and 1930 respectively.

The granting of protection has been by no means indiscriminate, and a large number of applications have been rejected where no good case could be made out on grounds such as those admitted as valid by the Indian Fiscal Commission.

The results of this policy may be summed up as follows. Customs have now become the chief single item of revenue in India, and it is difficult to see how the budget could have been balanced without the enormous increase, since 1916, from this source. The protected industries have undoubtedly benefited greatly, at the cost of enhanced prices to consumers and at the cost of the taxpayers in the case of bounties.<sup>3</sup> The steel industry, for instance, has been enabled to continue to produce and expand during the periods when world prices have been reduced to ruinous levels. The Bombay cotton mill industry has been saved, if not from depression, at least from the worst results of Japanese competition.<sup>4</sup> The match industry has

<sup>1</sup> See p. 293, below.

<sup>2</sup> Most of these duties have now been removed, as the hoped-for reorganization and development did not take place.

<sup>3</sup> Cf. Dey, *The Indian Tariff Problem*, 1933.

<sup>4</sup> The cotton duties and agreements are discussed at length below, pp. 285 et seq.

been firmly established, so that imports are now negligible, whilst India is now practically self-sufficing as regards sugar, which formerly ranked among her chief imports.

If the protection policy has preserved Indian industries from the contraction which the depression might have produced, there has, on the other hand, been little or no indication of any resulting acceleration in the tempo of industrialization,<sup>1</sup> and there have even been complaints that Indian industries utilizing imported raw or semi-manufactured goods have been injured by the revenue duties, some of which have therefore been reduced or removed on the recommendation of the Tariff Board.

After 1922 the revenue duties were unaltered in essentials until 1931, when, owing to the depression and the serious budgetary position, it became necessary to increase taxation. Amongst other measures surcharges were imposed on all existing duties exceeding  $2\frac{1}{2}$  per cent., whilst the emergency budget of September 1931 further increased all duties exceeding  $2\frac{1}{2}$  per cent. by 25 per cent. of the existing rates.<sup>2</sup>

Since 1931 the chief tariff changes have been connected with increased Japanese competition in the cotton piece-goods trade, and with the extension of Imperial preference by the Ottawa Agreement. In regard to the former, the duties on non-British cotton piece-goods were raised to 50 per cent. in 1932 and to 75 per cent. in 1933, whilst at the same time the Indo-Japanese treaty of 1904 was denounced, and negotiations began for a new commercial agreement with Japan, which was concluded early in 1934.<sup>3</sup> In addition the Safeguarding of Industries Act, 1933, gave the Government power to alter duties, in case of emergency, without legislation. Under this Act no less than 1,433 applications for assistance were received, but the Government thought that use of the Act might pre-

<sup>1</sup> The proportion of the population dependent upon industry was slightly less in 1931 than in 1921.

<sup>2</sup> At the same time a low duty was imposed on raw-cotton imports.

<sup>3</sup> For details and the terms of the new agreement see pp. 287 et seq., below.

judice the negotiations with Japan, and decided to introduce *ad hoc* legislation instead. Accordingly the Indian Tariff Amendment Act of February 1934 joined specific duties to the existing *ad valorem* duties (the higher of which will operate) on a large number of manufactured articles, including many kinds of textile manufactures, china, porcelain, soaps, &c., which were being sold at exceptionally low prices. The duties apply to goods from all non-British countries, but principally affect imports from Japan. This was in accordance with the principles of the Ottawa Agreement of 1932, which must now be examined.

In the past Imperial preference has been opposed in India, partly because of suspicion due to the alleged influence of Lancashire opinion and interests on tariff policy in India, and partly because it was considered that India had 'little to gain but much to lose' from such a policy. The latter argument contained much truth so long as Great Britain remained a Free Trade country, but the situation has been completely altered by the change in British policy since 1931. Indian trade would be seriously injured if excluded from the new British preferential system.

The Indian Agreement formulated at Ottawa followed the same general lines as the agreements with the Dominions, but included certain provisions designed specifically to suit Indian conditions and interests. In general the Agreement provided for the admission of Indian goods to the British market, either free or at preferential rates, in return for a preference in India for a long list of British manufactures. In drawing up the Agreement the principles laid down by the Indian delegation, namely, that India's existing scheme of protection could not be relaxed, that her customs revenue must not be imperilled, and that she should not be bound for a series of years, were fully respected. The provision for making preferential arrangements with the non-self-governing Colonies, as well as with the Dominions, is of special importance to India, and offers valuable prospects for retaining and developing overseas markets (e.g. in East and West Africa, the British

West Indies, and Malaya) for textiles, and for securing new markets for new lines of export trade (e.g. Indian pig-iron and steel goods).

Another important provision was the promise that the British Government would co-operate in any scheme to promote the greater use of Indian cotton in Lancashire. An Indian Cotton Inquiry Committee<sup>1</sup> was appointed by the Lancashire industry and carried out experiments as to the best methods of using Indian cotton, whilst two Cotton Commissioners were sent out to investigate conditions, to report on cotton crops, and in general to facilitate the supply and sale of Indian cotton to Lancashire.

The Ottawa Agreement deliberately omitted provisions for the treatment of British steel and cotton goods of types that are subject to protective duties in India, as Tariff Board inquiries into these two industries were proceeding at the time. It was, however, provided that steel goods subject only to revenue duties should pay a standard rate of 20 per cent., and a preferential rate, for British goods, of 10 per cent.. In addition, a supplementary agreement provided special treatment for British galvanized sheets in return for the continued free entry of Indian iron and steel into the United Kingdom. Since then the Tariff Board reports have been issued, and legislation retaining the preferential principle has been passed for both steel and cotton goods.

Eventually a Trade Agreement was signed on behalf of the British and Indian Governments on January 9th, 1935, supplementing the Ottawa Agreement, by bringing within its scope protective (as well as revenue) duties on British goods. The Agreement did not alter existing rates of duties, but laid down the principles to be followed in fixing protective duties on British goods. It provided (*a*) for the retention of Imperial preference and for the existing margin of preference; (*b*) that Indian protective duties should not be more than sufficient to equate the prices of imported goods to the fair selling price of similar Indian

<sup>1</sup> Since enlarged and renamed the Lancashire Indian Cotton Committee.

goods;<sup>1</sup> (*c*) that if and when the emergency surcharges of 1931 were removed from the generality of goods, they should also be removed from cotton piece-goods imported; (*d*) that full opportunities would be afforded to any British industry to state its case before the Indian Tariff Board, and that in the event of radical changes in tariff rates an inquiry should be instituted on the request of the British Government.

In return the British Government gave the following assurances: (*a*) that efforts should continue to encourage the use of Indian raw cotton in England, and that similar action should be taken with regard to other Indian commodities; (*b*) that Indian pig-iron should be admitted free so long as the existing privileges to British steel goods remained in force; (*c*) that India should receive a share in any privileges which might be given to British goods in colonial markets.

Although the Agreement did not require ratification by either the British or Indian Legislatures, a resolution for its rejection was carried by 66 votes to 58 on January 29th, 1935. This in no way affected the validity of the Agreement, but was an indication of the attitude of the Congress Party to the trade policy of the Government of India.

The Ottawa Agreement has undoubtedly tended to promote India's trade within the Empire. For instance, India's position in the British market as regards various raw materials,<sup>2</sup> especially raw cotton, has distinctly improved, as it has also for a number of manufactures, including coir yarn and mats, vegetable oil, oil-seed cake, paraffin wax, woollen carpets and rugs, sandalwood oil, shellac, and pig-iron. India has captured a large part of the British market for imported pig-iron, and in 1936-7 India supplied 18 per cent. of Lancashire's imports of raw cotton as compared with 4 per cent. in 1932-3, i.e. 601,000 bales as compared with only 167,000 in 1932-3.

<sup>1</sup> This principle has already been adopted in the Australian and Canadian Agreements.

<sup>2</sup> e.g. rice, undressed hides and skins, magnesium chloride, linseed, castor seed, groundnuts, and lead.

It is sometimes overlooked in India that the United Kingdom is the best market for Indian goods, just as India is the best market for British goods.

From the British point of view the preferences have already helped to improve the position of many British manufactures in the Indian market, although the depreciation of the yen more than counterbalanced any advantage from the preferences in the case of certain articles such as apparel, various textiles, umbrellas, and bicycles.<sup>1</sup> The British share of India's imports rose from 37 to 41 per cent. between 1932-3 and 1933-4, whilst the share of India's exports taken by the United Kingdom rose from 28 to 32 per cent. Since then the share of the United Kingdom in India's imports has fallen slightly again, i.e. to 38 per cent. (1936-7), while her share of India's exports has remained stable at 32 per cent.

The influence of preferences on the trade between India and the non-self-governing Colonies is at present difficult to trace, but this part of the scheme is capable of considerable expansion and is still only in its initial stages.

After the conclusion of the new Indo-Japanese Agreement—to be dealt with in the next chapter—which fixed quotas for Japanese piece-goods and a duty of 50 per cent. on non-British piece-goods, the Indian Tariff Textile Protection (Amendment) Act was passed, giving statutory effect to the relevant clauses of the Japanese Trade Convention and of the unofficial agreement drawn up at the end of 1933 between the Indian and British textile industries.<sup>2</sup> The Act imposed duties, with preference to British goods, and with specific alternatives to the *ad valorem* duties on a number of different classes of textiles. For cotton piece-goods it embodied the duties, namely 50 per cent. on non-British goods (as against 25 per cent. on British goods), agreed upon in the Indo-

<sup>1</sup> Cf. *Report on the working of the scheme of Preferences*. It should be noted that the figures on which these conclusions are based are necessarily not quite up to date. The situation has somewhat changed since the conclusion of the Indo-Japanese Agreement.

<sup>2</sup> See p. 286, below, for further details.



Japanese Convention. It also transferred artificial-silk goods to the protective schedule, with a preference for British products.

Since then the tariff system has remained fundamentally unchanged, except that in 1936 the duty on certain types of British cotton goods was reduced from 25 per cent. to 20 per cent.

Finally, the question of India's fiscal autonomy must be more fully discussed, in view of the widespread allegations that the principle has not been observed.

It has already been pointed out<sup>1</sup> that the Fiscal Autonomy Convention means that the Home Government will not interfere with tariff measures agreed upon by the Government of India and the Legislature. It does not mean that the final word on tariff questions rests with the elected representatives of the Indian peoples.

Indian opposition to the preferential duties for British steel, introduced in 1927, was based on objections to the principle of Imperial preference. The allegation, which Indian publicists have always been ready to advance, that the principle of fiscal autonomy had not been observed, first obtained a semblance of substance in 1930, when fresh proposals were put forward for increasing the duties on cotton goods, and introducing the preferential principle for British goods.

At this time the principle of discriminating protection, but not that of Imperial preference, had been accepted. The problem was how to protect the Indian mill industry adequately, without unduly penalizing consumers by raising the prices of 'non-competing' imports. The Indian mills needed protection chiefly against medium-quality plain grey goods, mainly imported from Japan, competition not being serious from the coloured and bleached goods which form the bulk of imports from Lancashire. To impose a surcharge on Japanese goods would have involved the abrogation of the trade convention with Japan and a serious danger of retaliation by Japan.<sup>2</sup> It was there-

<sup>1</sup> p. 262, above.

<sup>2</sup> Japan was India's chief customer for raw cotton and pig-iron.



fore decided to proceed by giving preference to British piece-goods, but it was made perfectly clear that this would not involve acceptance of Imperial preference as a principle. The Government of India was fully aware of the suspicions which its proposals were certain to arouse, but the interests of the Indian consumers and of Lancashire happened to coincide.

In his budget speech Sir George Schuster emphasized the reality of the Fiscal Autonomy Convention, assuring the Assembly that decisions were left to the Government of India, but frankly admitted that 'in the final stages' a communication had been received from the British Government, asking for reconsideration of the situation from the point of view of reactions in England, as well as in India. The Government of India's reply had been that, although impressed by the British Government's representations, the main proposals must go forward. Indian interests must come first, though the Government was concerned to avoid unnecessary injury to British interests. Sir George Schuster proceeded to propose the raising of the duties on cotton piece-goods from all sources to 15 per cent., with an additional duty of 5 per cent., and a minimum of  $3\frac{1}{2}$  annas per lb. on plain grey goods, on non-British imports.

Opposition in the Assembly was so serious that eventually, in order to secure the necessary majority, an amendment was accepted which imposed the minimum duty of  $3\frac{1}{2}$  annas per lb. on plain grey goods of British as well as of non-British origin, and legislation on this basis was passed.<sup>1</sup>

The only possible ground for asserting that the Fiscal Autonomy Convention had been contravened was that consideration was given to Lancashire interests. Such 'consideration' prevails in parallel cases throughout the British Empire, though it may possibly be argued that the results in India, where responsible government had not yet been introduced, are not quite the same as in the case of the self-governing Dominions.

<sup>1</sup> The Bill passed by 62 votes to 42 in the Legislative Assembly.

It is clear, in any case, that in drawing up its original proposals the Government of India was concerned fundamentally with India's own interests, and that the motives behind the proposal for preference were economic and directed towards safeguarding the Indian consumer. The legitimacy of the British Government's action in making such representations can no more be called in question than their right to make the representations subsequently addressed to the Australian Government, protesting against increases in the Australian tariff on certain classes of cotton goods. In the latter case the grounds for protest may indeed be stronger, being based on the alleged contravention of certain clauses in the Ottawa Agreement, but the principle appears the same. If, in the representations made, convincing facts or arguments are included which had previously been overlooked by the other party, a modification of the duties originally proposed becomes a reasonable consequence.

The reality of Indian fiscal autonomy is perhaps best illustrated by the circumstances of the Ottawa Agreements. At the Conference India was represented by her own delegation of six members, of which five, including the leader, were Indians. The delegation acted throughout without reference to, or contact with, the India Office in London, and the Agreements themselves before being valid for India had to be ratified by the Indian Assembly. If further proof were needed, we may observe the course and methods of the Indo-Japanese trade negotiations. These were conducted in India without reference to 'home' opinion, and undoubtedly the Government of India had a perfectly free hand.

The controversy arose again in an acute form over the Indo-British Trade Agreement.<sup>1</sup> Critics of the Government asserted that the Agreement was one-sided, and complained that commercial interests were consulted in England but not in India. In the debate in the Legislative Assembly it was claimed that neither Indian opinion nor the Assembly had accepted the principle of Imperial

<sup>1</sup> Cf. pp. 266 et seq., above.

preference except under threat, and that the Agreement safeguarded British interests at the expense of Indian. In reply Sir Joseph Bhore maintained that there was no need to consult Indian opinion in advance, as the principles of the Agreement had already been endorsed by practice in India. 'Not one syllable of the agreement violated the Fiscal Autonomy Convention.'<sup>1</sup>

As the Agreement merely gave a 'more specific mould' to the existing policy in India, and as that policy had been endorsed by the last Legislative Assembly, the Government of India was clearly within its rights in making the Agreement. At the same time it could not be denied that the newly elected Legislative Assembly was opposed to the policy cemented by the Agreement.

The conclusion is that fiscal autonomy, as defined, is real, but that the political and constitutional situation inevitably entails the Government of India giving more weight, in formulating its proposals, to British interests, than would be the case if India had fully responsible government. In the meantime the five-year period for which the Ottawa Agreement was formed has come to an end, and the Indian Legislature has resolved not to renew it. At the present time negotiations are being carried on with the object of formulating a new agreement. Negotiations for amendment of the Indo-Japanese Agreement have already been completed and a new pact has been signed.

## 2. THE ORGANIZATION AND FINANCE OF LARGE-SCALE INDUSTRIES AND THE ROLE OF FOREIGN CAPITAL

It is essential to realize the great part played by foreign capital and enterprise in the development of India's modern industries. British capital and enterprise have played a large role in promoting the jute, mining, engineering, plantation, paper, and cement industries.<sup>2</sup> There are of course Indian companies engaged in most of these industries, but European concerns prevail, and normally

<sup>1</sup> *The Times*, Jan. 31st, 1935.

<sup>2</sup> As well as in establishing banking, insurance, and coastal shipping and in constructing the railways and conducting overseas trade.

the Indian companies have a smaller capital and output. The outstanding exceptions have been the cotton mill industry, the Tata iron and steel, hydro-electric and associated enterprises, and those sugar factories which have been established since 1930. The number of Indian enterprises which have sprung up in all spheres has, moreover, greatly increased since the beginning of this century.

A distinction must obviously be made between the raising of capital abroad and the ownership of such capital. For instance, although the jute industry is the outstanding example of an industry promoted, controlled, and financed by British companies, yet at present some 60 per cent. of the capital is Indian-owned. On the other hand, even when the capital and control are predominantly Indian, the technical management may be largely in foreign hands, as was the case at first in the cotton and steel industries.

India's position with regard to foreign capital is, therefore, very different from that of either Japan or China. Japan borrowed abroad to finance her industrial development, but retained control of the capital in her own hands, and eventually evolved from a debtor to a creditor nation. China also resorted to foreign capital and permitted foreign enterprises to work within the country, but her defaults on foreign obligations have made foreign investors shy of Chinese investments, so that capital has been more expensive and more difficult to procure than in India. India, through her easy access to the London capital market, has enjoyed a definite advantage in this respect in comparison with China, but in comparison with Japan has suffered from the limitation that her use of imported capital has carried with it outside control over the choice of investments, and hence over the general trend of economic development. It is sometimes alleged that investment has been guided by British rather than Indian interests, that profits and interest have been drained out of the country, that enterprise has been concentrated upon commercial and a few special types of industrial concerns to the neglect of broader industrial needs, that Indians have not

enjoyed full opportunities for technical and managerial training and experience, and that undue advantage has been taken of the cheapness and abundance of Indian manual labour. Although such allegations may exaggerate the evils, and may erroneously attribute the latter to deliberate policy, some of them contain an element of truth, and the problem has arisen how to secure for India the advantages without the disadvantages of the continued use of foreign capital. The Indian External Capital Committee (1925) adopted the common-sense view that foreign capital was beneficial to India, but that the increased use of indigenous capital would be still more advantageous. The Committee, however, recommended that direct financial aid, such as a bounty, should not be granted to any particular undertaking unless reasonable facilities are granted for the training of Indians, and unless, in the case of a public company, the latter is registered in India, has a rupee capital, and a certain proportion of Indian directors.<sup>1</sup> These principles were accepted by the Government, which has also encouraged Indian industries by making all stores purchased by the Government from abroad liable to duties on the same terms as merchandise imported on private account;<sup>2</sup> by establishing a Central Stores Department, with revised rules; and by instituting the Rupee Tender System (January 1931), whereby purchases of stores shall normally be made in India, as a result of tenders called for in that country, payment being made in rupees.<sup>3</sup>

At this point reference must be made to one characteristic of European enterprise in India which affects fundamentally the conditions of industrial production. This is the peculiar form of organization, known as the Managing Agency System, which was adopted during the nineteenth century, and, in spite of much criticism, still prevails not only amongst European concerns, but also amongst Indian firms engaged in modern types of production.

The Managing Agency System is one whereby, when

<sup>1</sup> *Department of Overseas Trade Report, 1926-7*, p. 54.

<sup>2</sup> See Customs Act, 1924.

<sup>3</sup> *Department of Overseas Trade Report, 1927-8*, p. 58, and *1932-3*, p. 91.

a company is formed, the actual management is handed over to another firm—usually a well-known, long-established trading concern—which for this purpose is appointed its managing agent. The new company may be formed either in Europe, with European capital, or in India, with rupee capital. Industrial, plantation, and mining enterprises may all be organized in this way. The managing agent firm usually promotes the new company, helps to finance it (generally retaining enough shares to ensure ultimate control), and directly undertakes production and marketing. Each managing agent may thus control a number of firms engaged in different types of enterprise and obtains an income from fees for office expenses, from commission for management (based on either output, sales, or profit), from the sale of goods to the concerns managed, and from profits on the shares owned.

The advantages are that expert, reliable, and continuous management is secured, economies are obtained in administration and from the joint purchase of stores and materials needed by the various companies, and that joint selling organizations can be established for each type of product. Small companies in particular profit in this respect and are enabled to extend operations beyond the point which would be possible if they were dependent on their own resources. The system is criticized on the grounds that it leads to undue concentration of control;<sup>1</sup> often hinders initiative and enterprise, as managing agents tend to concentrate upon well-tried types of enterprise (especially during a depression); offers opportunities for exploitation and fraud; and leads to evils arising out of the possible clash between the interests of the various firms whose affairs may be in the hands of the same managing agent. The system also tends to perpetuate the racial grouping of interests, and thus to prevent co-operation between Indian and British firms. In the past it has un-

<sup>1</sup> The managing agents in practice control the nomination of directors, and the same names appear over and over again on the various boards of directors.

doubtedly promoted industrial development, but appears to many observers to have outgrown its utility. It has been apt to subordinate the interests of shareholders to those of the managing agents, to limit unduly the number of individuals concerned in the direction of industry, to prevent the establishment of independent boards of directors, and to hinder the development of a sound relationship between industry and banking.

The worst evils were found in the cotton mill industry, where the managing agents' representatives had financial rather than technical training and experience,<sup>1</sup> and where the managing agency became practically an hereditary office, passing from father to son irrespective of ability and experience. Thus the system tended at its worst to perpetuate what are, perhaps, the two chief factors preventing more rapid industrial development in India, i.e. the deficiency of men capable of industrial leadership, and inefficient industrial organization. On the other hand it rendered important financial services both in normal times and in periods of depression.

An attempt has recently been made to eliminate some of the worst features of the system. The Indian Companies (Amendment) Act, 1936, attempts in the first place to remedy some of these evils by regulating the status and activity of managing agents, directors, and shareholders.<sup>2</sup> The law defines a managing agent for the first time, and attempts to prevent some of the malpractices prevalent in the past by limiting the powers of managing agents, whilst at the same time restricting the period for which a managing agency can be granted to twenty years. The provisions with regard to directors and shareholders aim at widening the choice of directors, limiting their powers, and increasing the powers of shareholders.

A step has been taken in the right direction, but the

<sup>1</sup> It is said that out of 175 directors of Bombay cotton mills, only 11 have technical qualifications.

<sup>2</sup> See *Asiatic Review*, July 1937: 'The Indian Companies (Amendment) Act, 1936', by Vera Anstey; and 'The Future of Industrial Management in India', by N. Das.



reappointment of managing agents is still permitted, and their control of industrial management is not lessened except in cases of conspicuous inefficiency or fraudulence.

In the second place the Act regulates the winding up and liquidation of companies, and provides special regulations for banking companies.

The problem of industrial finance has developed step by step with modern large-scale industry. Little capital was needed by the old indigenous industries, whilst the 'shroffs', indigenous money-lenders, bankers, &c., provided remittance facilities and performed various banking functions. During the nineteenth century industries under foreign control could obtain capital from abroad, whilst adequate financial facilities were afforded them by the European-controlled joint-stock banks which began to be established. But since the beginning of this century, with the increase in industrial and other joint-stock concerns, the Swadeshi movement, and the new industrial policy of the Government, the demand for capital has greatly increased. Modern financial facilities have greatly developed, though it is true that they have been available mainly to foreign and well-known Indian firms.

There is a scarcity of capital for industrial purposes in India and this is partly due to competition from other forms of investment. The main body of Indian investors still prefers to invest in real property, ornaments and jewellery, money-lending, trade, and Government securities rather than in industry, in which many serious losses have been incurred. Moreover Indian investors expect a high return on their capital, at least 9 or 10 per cent.<sup>1</sup> Hence industry has had to rely on a limited class of investors, while the high cost of capital has retarded development and confined enterprise to fields yielding high profits.

The lack of co-operation between Western and indigenous enterprises is reflected in the division of financial

<sup>1</sup> The Tariff Board, in determining a selling price which would give a 'fair return' on capital invested, estimated for not less than 10 per cent. on ordinary shares.



institutions into two classes—European and indigenous—without any close interdependence, whilst there is no adequate central control even of European credit agencies.

Until the establishment of the Reserve Bank in 1935 the European credit agencies concerned with industrial financing were the Imperial Bank, with its 162 branches, and the joint-stock banks, whilst industrial capital is also provided by managing agents and depositors. Indigenous agencies include various types of bankers, money-lenders, 'shroffs', and loan offices. There is no close connexion between European and indigenous credit agencies, and no developed market for discounting indigenous trade bills. The financial facilities available for indigenous concerns are therefore unsatisfactory, interest rates vary over an extraordinary wide range, and indigenous rates do not bear any definite relation to the Imperial Bank rate.<sup>1</sup> Moreover until 1935 financial control was divided between the Government (which controls currency) and the Imperial Bank, whilst the Imperial Bank rate had little influence on the general credit situation, and failed to control interest rates throughout the country. The great defect was not so much the high average rate for money as the great variations and fluctuations (including seasonal fluctuations)<sup>2</sup> in the rates charged.

The provision of 'block' and 'working' capital also presents certain problems, which may be shortly considered before the changes consequent upon the establishment of the Reserve Bank in 1935 are analysed.

In India the principal modern industrial concerns have obtained their block capital from public or private subscription of shares, direct deposits, especially prevalent in the case of the cotton mill industry,<sup>3</sup> and money put up

<sup>1</sup> The large joint-stock banks advance at 1 per cent. above the Imperial Bank rate; smaller banks at 2–3 per cent. above; indigenous concerns charge 12–34 per cent. and even more in times of stringency.

<sup>2</sup> The Imperial Bank had power to issue emergency currency up to a certain limit in times of seasonal stringency, but this proved an inadequate remedy, largely because such an additional currency could not be issued until the bank rate had reached 6 per cent.

<sup>3</sup> In Bombay and Ahmedabad short-term deposits have provided part

on private account by individuals, firms, and partnerships. 'Under-capitalization' has been and still is one of the chief defects of Indian industries. Too often the initial paid-up capital has been insufficient to pay for the block capital required and quite inadequate for even the minimum working capital.<sup>1</sup> Hence permanent financial needs have been met by fluctuating and short-term funds from direct deposits or from banks. On the whole it appears that established industries and well-known firms have encountered little difficulty in raising initial capital, but that difficulties arise for new types of industries and small concerns. The chief need is for a wider class of investors, and for a better-developed capital market.

Working capital is at present obtained from private deposits, from the *entrepreneurs* and their friends, and from loans from joint-stock or indigenous banks. The danger of relying on short-term private and bank deposits for permanent needs is apparent. On the other hand it appears that the policy of the joint-stock banks may be unduly rigid. The method of hypothecation of stocks is unsatisfactory, partly because of the inconvenience involved, and partly because it has come to be looked upon as a sign of financial weakness, utilized only as a last resort, and hence when used endangers the reputation of the firm. On the other hand the requirement of two signatures, one of which should be that of a managing agent, tends to penalize smaller concerns, to over-emphasize the importance of the managing agent, and hence to perpetuate the excessive concentration of industrial leadership and to delay the development of a sound relationship between industry and banking.

It may be concluded that, although capital is undoubtedly dear in India, the more serious problems have been due to defects in industrial and financial organization. The Indian Banking Inquiry Committee, which

of the block, and a large proportion of the working capital. This is obviously dangerous, and has led to great difficulties when, during a depression, such capital has been withdrawn.

<sup>1</sup> Cf. Lokanathan, *Industrial Organization in India*, 1935.

reported in 1931, naturally included industrial finance in its survey, and made suggestions designed to remedy some of these defects. Its relevant recommendations included the establishment of a Reserve Bank, measures to increase contact between joint-stock and indigenous banks, and the establishment of an Industrial Corporation to promote public-utility undertakings (the proposal for an Industrial Bank being rejected by the Committee). In accordance with the first recommendation the Reserve Bank was established in 1935. The main functions of the Bank<sup>1</sup> are to control credit and currency, to act as the note-issuing authority (it is obliged to buy and sell sterling at a given rate), and to act as banker to the Government and to commercial banks. It has wide powers to make loans and advances, to deal in bills and promissory notes, and to undertake open-market operations. A list of scheduled banks, which are obliged to keep a balance with the Reserve Bank and in return are entitled to have their paper discounted, has to be maintained, and it is hoped eventually to induce indigenous banks to become associated in this way with the Reserve Bank. The Bank was obliged to create an Agricultural Credit Department, and to report within three years upon methods of linking the indigenous banking system with joint-stock banking. In addition, as has already been seen, the Indian Companies (Amendment) Act, 1936, attempts to remedy some of the worst defects of the Managing Agency System, and to improve methods of capitalization.

It is, however, too soon to judge the full effects of these reforms. Undoubtedly much remains to be done. In particular there is urgent need for improvement in industrial organization in general, in the working of the Managing Agent System, and in methods of training and recruiting industrial leaders; for closer co-operation between European and indigenous enterprises and institutions; and for some modification in the short-term credit and discounting policy of the banks.

<sup>1</sup> See Vera Anstey, *Economic Development of India*, 1936 edition, p. 488, xxiii.

In conclusion two additional factors affecting the costs and organization of industry may be mentioned, namely the size of industrial units and the localization of production.

At present the prevailing size of industrial units is smaller in India, particularly in the cotton mill industry, than in competing countries, such as England and Japan. It is probable that at present larger units would not prove remunerative, owing to the limitations of managerial ability. Hence full advantage cannot be taken of the economies of large-scale production. The localization of industries is at present very defective, e.g. in the cement and sugar industries. In the past insufficient attention has been paid to the problem, and the welfare of industries has suffered from over-centralization of producing units, leading to excessive costs of transport for raw materials and finished products, remoteness of factories from the labour-recruiting districts, and very bad overcrowding in working-class city areas.

### 3. THE COTTON MILL, AND IRON AND STEEL INDUSTRIES

The cotton mill, and iron and steel industries are the outstanding examples of Indian industries which compete, or may compete, in international markets.

In the cotton mill industry the position differs for yarn and for piece-goods, which must therefore be considered separately.

To-day, as also before the War, Indian mill yarn predominates in the home market, normally providing 90 per cent. of India's needs. The production of Indian mills increased from 682 million lb. in 1913-14 to 1,016 million lb. in 1932-3, and (after some decline during the depression) to 1,054 millions in 1936-7. Imports fell from about 40 or 45 million lb. up to 1932-3 to 14 millions in 1936-7, and exports from a pre-war average of 192 millions to only 12 millions in 1936-7. Hence, although the Indian mills have increased their sales, prices have been depressed both by foreign competition and by the

necessity of selling at home the large quantities formerly exported, mainly to China. Bombay, as the chief exporter of yarns, has been particularly hard hit by imports of yarn, which are now mainly obtained from the Far East, instead of from Lancashire, as is shown by the following figures:

PERCENTAGE SHARES IN YARN IMPORTS

	<i>U.K.</i>	<i>Japan</i>	<i>China</i>	<i>Total for Far East</i>
1913-14 . . .	80	2	..	..
1929-30 . . .	46	25	24	49
1931-2 . . .	38	20	42	62
1934-5 . . .	29	33	38	71
1935-6 . . .	22	48	30	78
1936-7 . . .	27	56	17	73

In some years imports from Japanese-owned mills at Shanghai exceeded imports from Japan, but after 1931 imports from Japan itself were stimulated by the depreciation of the yen. Before the War Lancashire's staple line was yarn of counts 30's to 40's. To-day Indian mills have encroached on these counts, while the bulk of imported yarn of this quality comes from Japan, leaving to Lancashire mainly the higher counts.

The following table gives the main facts with regard to the production of and trade in cotton piece-goods:

QUANTITY OF MILL-MADE CLOTH AVAILABLE FOR  
CONSUMPTION IN INDIA<sup>a</sup>  
(In million yards)

	<i>1913-14</i>	<i>1929-30</i>	<i>1930-1</i>	<i>1931-2</i>	<i>1932-3</i>	<i>1933-4</i>	<i>1934-5</i>	<i>1935-6</i>	<i>1936-7</i>
Indian mill production . .	1,164.3	2,419.0	2,561.1	2,989.8	3,169.9	2,954.0	3,397.5	3,571.4	3,572.0
Net imports . . .	3,135.0	1,896.9	872.6	759.9	1,203.7	771.0	943.7	946.7	764.0
Exports of Indian goods . . .	89.2	133.4	97.7	104.6	66.4	56.4	57.2	70.0	97.0
Available for consumption in India . . .	4,210.1	4,182.7	3,336.0	3,645.2	4,307.2	3,668.6	4,284.0	4,448.1	4,239.0

<sup>a</sup> These figures exclude exports by land, which generally amount to a figure equal to about 4 per cent. of the 'total available'.

Whereas before the War imports formed three-quarters of the total available for consumption in India, and Indian

mill products one-quarter, now the position is more than reversed. Exports of Indian piece-goods have not altered greatly in quantity, but, as regards destination, whereas formerly the main markets were in the Far East, to-day they are in Persia, Ceylon, Iraq, East Africa, Malaya, and Arabia.

The Indian mills have thus greatly improved their competitive position, owing to improved efficiency, protective tariffs, the Swadeshi movement, and, at times, the Indian boycott of foreign products. The total piece-goods available for consumption in India as shown in the preceding table are to-day slightly greater than the 1913-14 figure, but the rise is much less than proportionate to the increase in population, so that the *per capita* figure has fallen. But if hand-loom production is included it can be shown that the *per capita* consumption of all types of cotton piece-goods has slightly but definitely increased, as compared with the average for 1909-10 to 1913-14. In 1936-7 Indian mills supplied about 60 per cent., imports 14 per cent., and hand-loom 26 per cent. of the total available for consumption.<sup>1</sup> The hand-loom supply the coarsest qualities and certain 'specialties', the Indian mills intermediate, and imports from abroad the finer qualities, but the tendency is for improvement in the quality of Indian mill products, especially those exported.

The following figures show the changes in the source of piece-goods imported:

PERCENTAGE SHARES IN PIECE-GOODS IMPORTED

		U.K.	Japan	Netherlands	U.S.A.
1913-14	. .	97.1	0.3	0.8	0.3
1928-9	. .	75.9	18.8	1.0	1.5
1932-3	. .	49.1	48.5	0.4	1.7
1935-6	. .	46.4	52.4	0.2	0.1
1936-7	. .	43.7	54.6	0.2	..

<sup>1</sup> *Annual Review of the Trade of India, 1933-4*, p. 37.

Here, as for yarns, Lancashire has suffered chiefly from Japanese competition.

The Indian mill industry after about 1923 entered a period of depression, the causes of which were investigated by the Tariff Board Report of 1927. The chief factors alleged to affect India as a whole were the loss of the export trade in yarn to China, the stabilization of the rupee at 1s. 6d. (of merely temporary importance), faults of organization and finance, and Japanese competition. Faults of organization and finance have already been discussed, but it should be added that in and after 1923 many mills were suffering specifically from the over-capitalization and over-generous distribution of profits of the war and post-war booms. Certain mills which had been 'conservatively' financed have been able to pay dividends all through the depression.

Japanese competition lay at the root of the demand for protection and continued to increase, despite the adoption and intensification of protective tariffs, until the recent Indo-Japanese Agreement fixed import quotas for Japanese goods.

From the Indian point of view the main reasons for Japan's competitive strength may be summarized as follows: (i) the superior equipment, organization, and finance of the Japanese mills; (ii) superior marketing organization; (iii) excellent organization for the purchase of raw material, full advantage being taken of cheap ocean freights and of the alternative sources of supply, i.e. U.S.A. and India; (iv) temporary advantage from the depreciation of the yen; and (v) advantages as regards labour supply and organization. It has already been mentioned that even since the levelling up of factory legislation, output per worker remains higher, and labour costs remain lower, in Japan than in India. Japan also gains an advantage from the use of the double-shift system and the more extensive employment of female labour, while the efficiency of Indian labour is adversely affected by climatic conditions and inferior factory organization and equipment. The greater prevalence of labour unrest in India is another disadvantage.

Bombay City has been particularly affected by the loss of the export yarn trade, by defects in organization and finance, and by labour unrest. In addition wages are higher, owing to the higher cost of living, as are also local taxes, the cost of fuel, power, and water. The high cost of transporting raw cotton from the areas of production to Bombay City is another element in the situation.

The Indian cotton mill owners, especially in Bombay, began to plead for protection as soon as the depression became severe.<sup>1</sup> Some relief was afforded in 1925 by the removal of the countervailing excise, but eventually the Tariff Board was asked in 1926 to investigate the claim for protection and reported in 1927. The Board's recommendation for an increase in the duty on piece-goods to 15 per cent. was not, however, accepted by the Government, on the ground that the cotton industry was already well established, and hence did not fulfil the first condition laid down by the Fiscal Commission. But the depression continued to be so severe that the Government was obliged to give way, and in 1930 transferred cotton goods to the protective schedule, the duties being fixed at 15 per cent. (or  $3\frac{1}{2}$  annas per lb., whichever was the higher) for plain grey goods of British origin, and 20 per cent. (or  $3\frac{1}{2}$  annas) for grey goods of non-British origin. Other types were to pay the same *ad valorem* duties, but were not subject to the specific duties.

In 1931 the surcharges imposed by the Finance Act and the emergency budget increased the *ad valorem* rates on piece-goods to 25 per cent. on British, and  $31\frac{1}{4}$  per cent. on non-British, goods, with equivalent increases in the specific duties on grey goods.

In spite of this Japanese competition became so intense that in August 1932 the duty on non-British cotton piece-goods was raised to 50 per cent. Even this proved no barrier to the increasing Japanese imports, owing largely

<sup>1</sup> In 1923 the duty on piece-goods was 11 per cent., as compared with a general revenue duty of 15 per cent. The countervailing excise remained at  $3\frac{1}{2}$  per cent.



to the depreciation in the yen; hence in 1933 the Government denounced the Indo-Japanese Trade Convention of 1904, which provided for mutual 'most-favoured-nation' treatment, and raised the duty on non-British piece-goods to 75 per cent.

Japan retaliated by announcing a boycott of Indian raw cotton, but the Government adopted a policy of compromise, and negotiations for a new trade agreement began in September 1933, a Japanese mission being sent to India for the purpose. The resulting agreement (adopted in general terms in January 1934, although details were left to be worked out later) allotted Japan an annual import quota of 125 million yards unconditionally, 325 million yards if she purchased 1 million bales of Indian cotton, and 400 million yards if she purchased  $1\frac{1}{2}$  million bales.<sup>1</sup> It was agreed that the duty on non-British goods should be 50 per cent., and that the agreement (based on a mutual 'most-favoured-nation' foundation) should remain in force until 1937. Extra duties might be imposed on Japanese goods, if the yen depreciated below the level attained at the end of 1933.

This agreement, the early effects of which have been mentioned in Chapter I, had the advantages that it ensured the continuance of trade connexions between Japan and India, safeguarded the Indian mill industry, and secured a stable market for Indian cotton. On the other hand there were from the Indian point of view loopholes in the agreement.<sup>2</sup> For instance Japan might increase her markets in India by exporting from Japanese mills in Shanghai, or she might concentrate on rayon goods, to which the quota did not apply. Japan first supplied artificial-silk yarn to India in 1931-2, and in 1932-3 sent 1.79 millions out of a total import of 11 million lb.<sup>3</sup> In the latter year Japan sent India 111.7 million yards of artificial-silk piece-goods (out of a total Indian import of 112.8 millions) despite the

<sup>1</sup> Japanese piece-goods are divided into classes, with quotas for each, but some variations between categories are permitted.

<sup>2</sup> Cf. *The Economist*, London, Feb. 24th, 1934, p. 464.

<sup>3</sup> Italy sent 5.6 millions and Britain 1.6 millions.

50 per cent. duty.<sup>1</sup> The agreement was amended in April 1937. In essentials the *status quo* was maintained, but slight adjustments were made in the quota, whilst certain minor changes in the permissible allotment of the quota amongst categories of piece-goods were made in favour of Indian interests.

Meanwhile negotiations had also been proceeding between Indian and Lancashire mill-owners, a textile mission, headed by Sir William Clare Lees, visiting India at the same time as the Japanese mission and resulting in the Lees-Mody Pact of October 1933.

It was agreed that protection against British cotton goods should not be increased, that when the Government found it possible to remove the surcharges of 1931 the Indian mill-owners should not propose fresh duties on British cotton piece-goods, that preferences should continue, and that the duties on artificial-silk and mixed textiles should be reconsidered on a preferential basis. In return Lancashire promised to share advantages in the colonial markets with India, and to stimulate the use of Indian cotton along the lines suggested at Ottawa. Finally both parties bound themselves to the principles of direct discussion and negotiation. These principles were endorsed by the Indo-British Trade Agreement of January 9th, 1935.<sup>2</sup>

A great change in the attitude of Lancashire towards tariff policy in India had become obvious after the War, due probably in part to increasing Japanese competition in the Indian market. Although Japanese imports have affected the Indian manufacturer by reducing the level of prices of cotton yarn and piece-goods in India, it is Lancashire which has so far borne the brunt of the competition, Indian mill production and sales having continuously expanded. This change in Lancashire's attitude was clearly demonstrated when in 1925 the counter-vailing excise was removed. The excise had been imposed in 1896 specifically to placate Lancashire's complaints at

<sup>1</sup> The Indian Tariff (Textile Protection) Amendment Act, 1934, admits British artificial-silk goods at 30 per cent.

<sup>2</sup> Cf. p. 266, above.

the unfairness of a 5 per cent. import duty. But in 1925 few complaints were heard, and the removal of the excise was even welcomed as aiding the Indian mills to withstand Japanese competition.

On the other hand, until quite recently there was no sign that India wished to co-operate with Lancashire. Great indignation had been expressed at the preference which, as mentioned above, was accorded to British cotton goods in 1930, and it was asserted that Lancashire had again interfered in Indian tariff policy for its own ends and that the principle of 'fiscal autonomy' had been flouted. The Government of India replied that the preference had been accorded for India's sake, on the ground that a duty of 20 per cent. on British goods would simply raise the prices of Lancashire products to consumers, such goods not being produced at present in India, whereas Japanese piece-goods compete directly with Indian products, and hereafter relations improved sufficiently to enable the agreement described above to be made.

Hence the common menace of cheap Japanese goods has at last led to a measure of co-operation between Indian and Lancashire mill-owners. Even so the agreement with Lancashire was confined to the Bombay Mill-Owners' Association, the Ahmedabad Mill-Owners' Association having refused to co-operate.<sup>1</sup>

It has already been seen that the Indian Tariff Amendment Act of 1934 introduced a scheme of protection based on the agreements with Japan and Lancashire,<sup>2</sup> while the principles of the latter agreement were endorsed by the Indo-British Trade Agreement. Undoubtedly the agreement with Lancashire and the subsequent legislation gave evidence of improved relations between India and Lancashire. Moreover, as we have seen, the duties on certain types of British cotton goods were reduced (from 25 per cent. to 20 per cent.) in 1936. It remains to be seen whether or not the present

<sup>1</sup> The Ahmedabad mills have prospered, in spite of the depression, and have gained much trade at the expense of Bombay.

<sup>2</sup> Cf. p. 265, above; and *The Times*, London, July 24th, 1934.

(1937) negotiations result in a new agreement, based on the same principles. If they are successful, the principle of preference will have been secured and the way will have been cleared for constructive measures to increase co-operation to the advantage of both parties. In other words, the policy adopted gives Lancashire a chance to adapt herself to more stable, if limited, opportunities, and paves the way for increased markets for Indian raw cotton, and for both India's and Lancashire's piece-goods. In 1934 British exports of cotton goods recovered to the 1932 level (approximately £8 million) and marked a 20 per cent. rise over the 1933 figures, the improvement extending to all classes except grey cloth; but they afterwards suffered a considerable reduction (to under £6 million), which was also spread over all classes of cloth. On India's side of the bargain, there was a very pronounced increase in the British purchases of Indian raw cotton—582,000 bales in 1936 against 132,000 in 1933; a rise, that is, of 340 per cent.

In 1934 steps were taken which assisted Indian cotton goods in colonial markets. The Anglo-Japanese Commercial Convention of 1905 has been denounced, and a quota policy put into force for Japanese textiles imported into certain colonial markets (including the British West Indies, Ceylon, and Malaya),<sup>1</sup> where cheap Japanese goods of various types had been making amazing progress.<sup>2</sup> The quotas have been very effective in reducing Japanese exports to the colonies affected, and Indian exports (along with British) have benefited therefrom.

The position and prospects of the Indian iron and steel industry remain to be considered.

This is an industry with splendid 'natural' advantages, which has been developed by Indian capital and enter-

<sup>1</sup> Cf. *Trade and Engineering Supplement of The Times*, May 19th, 1934. In Ceylon and the Straits Settlements the quotas met with great opposition, and in 1937 the Japanese quota for Ceylon was increased as a concession to local opinion, in spite of protests from Lancashire. The Congo Basin Treaties prevent preferential duties in British East Africa.

<sup>2</sup> Cf. *The Times*, June 21st, June 27th, and Aug. 16th, 1934.

prise, and which has already made great headway both in the home and in foreign markets. Pig-iron is at present its chief export, although exports of other types of iron and steel products, including steel bars, tend to increase.

India has unique advantages for the production of pig-iron, of which she is the cheapest large-scale producer in the world. She has excellent iron ore, found in proximity to coal, and good supplies of other necessary raw materials, e.g. limestone, magnesite, and manganese. Her pig-iron needs no protection and any surplus produced above her own needs for the production of steel can be readily sold in foreign markets. Three firms,<sup>1</sup> besides the Tata Iron and Steel Company, at present produce and export pig-iron, but Tata alone produces about 70 per cent. of the total and until quite recently was the only producer of steel in India. Within the last twelve months, however, several new projects for steel production have been adopted.

On the other hand India suffers from certain disadvantages in the processes connected with the conversion of pig-iron into steel, and it is this fact that has necessitated the imposition of protective tariffs on steel goods. Some of her disadvantages have been of a temporary character. These include the extremely unfortunate conditions under which the 'greater extensions' (begun in 1916) were carried out, involving purchases at tip-top prices, and several unexpected years' delay before production started; exchange difficulties; exceptionally keen competition owing to world-wide over-production in the steel industry; the expense of employing expert foreign technicians until Indians could be trained; the expense of providing a training institution; labour disputes, and unprofitable contracts for the purchase of coal. Other disadvantages are of a more permanent character, which accounts for the continued necessity for protection. These include the high cost of capital in India, this being of particular impor-

<sup>1</sup> The Bengal Iron Company; Indian Iron and Steel Company; and the Mysore Iron Works. The two former have now amalgamated.

tance in an industry requiring much fixed and working capital, the necessity of importing plant and machinery, and the difficulty of securing skilled supervisory, technical, and manual labour.<sup>1</sup> In addition the Indian industry was particularly hard hit by the depression because its development was too recent to have enabled it to build up reserves.

The recent progress of the steel industry is shown by the following figures of production at the Tata Iron and Steel Works:

(In thousand tons)

	1921-2	1925-6 <sup>a</sup>	1929-30	1932-3	1934-5	1935-6	1936-7
Pig-iron . . .	270	573	740	672	892	900	827
Steel ingots . . .	182	470	580	590	834	880	850
Finished steel . . .	125	320	408	427	604	646	667

<sup>a</sup> The first year of the full working of the 'greater extensions'.

The total production of pig-iron in India in 1934-5, 1935-6, and 1936-7 was 1,343,000 tons, 1,541,000 tons, and 1,557,000 tons respectively.

The effect of domestic development on the import trade has been that, whereas before the War India imported an annual average of 820,000 tons of iron and steel goods,<sup>2</sup> to-day she imports less than 400,000 tons per annum (360,000 in 1936-7). At the same time exports have risen steeply, from 42,000 tons pre-war to 597,000 in 1935-6, and 683,000 in 1936-7. Pig-iron accounts for about 84 per cent. of the exports by weight. Hence at the present day the quantity of iron and steel products exported actually exceeds imports, though the value of the latter is about five times as great, because of the large proportion of expensive finished goods. The heavy fall in imports began only with the recent depression. Increased production within India was up to that time absorbed by increased demand. It can therefore be said that Indian production, though increasing rapidly, cannot as yet

<sup>1</sup> The Tata Company has a far larger labour force in relation to output than Western steel firms.

<sup>2</sup> Including 12,000 tons of pig-iron and scrap, imports of which are now negligible.

supply the whole of India's normal needs. In the meantime there is a surplus production of pig-iron and of certain other products in the production of which India has special advantages, and this surplus is exported.

In the past Japan has been by far the best customer for Indian pig-iron, but her demand has recently declined,<sup>1</sup> whilst the United Kingdom is taking increased quantities both of pig-iron and of steel bars. The latter development may be attributed partly to the 'Supplementary Agreement' attached to the Ottawa Agreement.<sup>2</sup>

It has already been mentioned that the steel industry was the first to receive protection. During and immediately after the War, Tata made good profits, but when depression came in 1921 prices fell and the very existence of the company was threatened. The Tariff Board recommended duties on a large variety of goods, and bounties for others. These were imposed by the Steel Industry (Protection) Act of 1924. The value of the protection afforded was, however, almost immediately undermined by the sudden rise in the sterling value of the rupee. The Tariff Board recommended almost doubling the duties, but the Government preferred to grant bounties on production.

In 1927 the position was again reviewed. The bounties were abolished and new duties imposed at somewhat lower rates to last for seven years. There were, in most cases, additional duties on non-British goods. As in the case of cotton piece-goods, the preference was imposed for economic reasons, that is, in order to admit goods urgently needed in India, which happen to be those produced in England, at a minimum cost to the consumer, while penalizing the cheaper European goods, which compete more directly with home products. Power was given to the Government to vary these duties, should imports come in at abnormally low prices. The prefer-

<sup>1</sup> For a discussion of the position of the Japanese iron and steel industry and its raw-material requirement see pp. 129 et seq.; above.

<sup>2</sup> Cf. p. 266, above. Also *Report on the working of the scheme of Preferences*, p. 109.



ence has assisted British goods, but since 1929 low-priced goods, irrespective of quality, have tended to oust higher-priced British goods. In 1936-7 the United Kingdom supplied 46 per cent.,<sup>1</sup> Belgium 23 per cent., and Germany 13 per cent. of total imports.

At Ottawa the question of preference on protected iron and steel goods was deferred pending the report of the Tariff Board, but a 10 per cent. preference was granted on unprotected items, and the Supplementary Agreement provided, as already stated, for the continued free entry of pig-iron and steel, in return for concessions on British galvanized sheets.

The Tariff Board reported in 1934, and legislation has been passed extending protection until 1941, revising the duties in force,<sup>2</sup> but maintaining the preferential principle. The report also made recommendations for the reorganization of the industry along the lines of specialization and standardization. It concluded that the Indian industry had made substantial progress, despite the depression, and had effected satisfactory reductions in cost. It estimated that the share of the Indian market for steel goods obtained by the Tata Iron and Steel Company had risen since the inquiry of 1927 from 30 per cent. to 72 per cent.

It may be concluded that the steel industry, although still requiring moderate protection, is one of India's most promising and progressive industries, and that in the future India may become one of the chief exporters—if not the greatest exporter in the world—of certain types of iron and steel products.

#### 4. CHARACTERISTICS AND PROBLEMS OF INDUSTRIAL LABOUR

Certain characteristics of industrial labour, connected with the low standard and primitive conditions of life of the classes from which such workers are recruited, are common to most Eastern countries. But there are important differences between the various Eastern countries

<sup>1</sup> Compared with 59.8 per cent. in 1913-14.

<sup>2</sup> Some duties have been reduced, but preference has been increased.



themselves in regard to labour conditions generally and to the problems which affect the supply and efficiency of labour, and which determine labour costs per unit of output. Industrial organization in any one country is intimately connected with the relative cost of capital and labour, whilst the type of machinery used and rate at which it is worked depend to a great extent on the outlook, experience, and efficiency of the labour force in that country.

In India the standard of life of the classes from which industrial labour is recruited, and consequently industrial wage-rates also, are extremely low according to Western ideas. But efficiency and output per head are also far below Western and Japanese standards, a state of affairs not unconnected with the prevalence of illiteracy among Indian workers. This renders labour costs higher than might be supposed from a mere comparison of wages, and favours a primitive type of industrial organization, involving incidentally much waste of labour. No accurate methods of comparing the standard of life and efficiency of Indian and other workers have yet been devised. All, therefore, that can be done is to describe Indian conditions and problems in general terms, and merely to allude to certain rough comparative estimates.

According to the census of 1931 there were  $3\frac{1}{2}$  millions employed in organized industrial establishments at that date, of whom only  $1\frac{1}{2}$  millions came under the Factory Acts. This compares with 6.2 million industrial workers (23.7 per cent. of all occupied persons) in Japan in 1929, of whom 4.7 millions were employed in organized industries—actually more than in India, despite the fact that India has a population of 352.8 millions as compared with only 64.4 millions in Japan—whilst over 2 millions are subject to the Factory Acts. There are no reliable figures for China, but it has been estimated that in 1929 between 1.2 and 1.4 millions were engaged in organized industries. In all three countries the textiles predominate; these find employment for about 1 million workers in organized concerns in both India and Japan, and about half a million in China.

In India, as in both the other oriental countries, recruits are obtained from rural areas, sometimes from a considerable distance; only in one or two large centres, such as Bombay and Calcutta, is there even the nucleus of a permanent class of industrial wage-earners. The industrial worker is essentially 'an agriculturist at heart', and retains contact with his village, where he usually leaves his wife and children and to which he returns periodically. This fact accounts largely for the heavy labour turn-over in factories, the difficulty in increasing efficiency by welfare work or higher wages, and for some of the extremely bad conditions of life in large urban centres, including the lack of home-life and the immorality due to the excess of males over females. The industrial recruit is a temporary sojourner in a strange land, often in debt from the start, and he usually shares a single-room dwelling with several other individuals or even families.<sup>1</sup> But as recruits come from the least-fortunate classes of rural dwellers, workers being 'pushed, not pulled' to the cities, even the appalling conditions of life and low wages are, on balance, an improvement in comparison with what can be obtained in the areas of recruitment.<sup>2</sup> Attempts have been made by Improvement Trusts, philanthropic bodies, co-operative societies, and certain employees to provide working-class dwellings, but have not been of a nature and on a sufficient scale to provide any real solution for the problem.<sup>3</sup>

Nevertheless the link with the village has certain advantages which, in the opinion of the Royal Commission on Labour in India, outweigh the disadvantages. The periodic visits to his own village help to maintain the health and spirits of the labourer, and the possibility of returning home gives him a stronger position during periods

<sup>1</sup> The overcrowding, lack of sanitation, and scarcity of water, &c., are appalling in urban areas. In Bombay in 1921, 66 per cent. of the total and 97 per cent. of the working-class population lived in one-room dwellings with 5 to 9 persons per room.

<sup>2</sup> It might be more accurate to say that the real wages of industrial workers are higher, but that conditions of life are more disagreeable and unhealthy, especially for women and children.

<sup>3</sup> Cf. Gupta, *Labour and Housing in India*, 1930.

of depression or in the case of a dispute. The Commission recommends that the link with the village should be maintained and regularized by the grant of regular 'leave', after which the worker should return to his former employer. In this way a more permanent labour force could be built up, without losing the advantages of the present system.

The 'push' from rural areas was, during the depression, accentuated by the terrible rural distress due to the fall in prices, and to the growing number of persons divorced from the land and dependent on wages as agricultural or casual labourers. Unfortunately industrial unemployment appeared simultaneously for the first time in India, so that the workers were doubly hit by the depression.

The great bulk of industrial labour in India, in the textiles as well as in other occupations, consists of adult male labour, as contrasted with the preponderance of women and children in China and Japan, especially in the cotton industry. This fact makes the undoubtedly greater efficiency of the Japanese textile workers all the more remarkable, especially as the Japanese girl workers seldom remain more than 3-4 years at the mills. In India only one-sixth of the factory workers are females as compared with over 50 per cent. in Japan,<sup>1</sup> and only 1.9 per cent. are children (of 12-15 years, and these are mostly males) as compared with 10.2 per cent. in Japan. The proportion of women and children employed in unregulated concerns, where conditions are particularly bad, is unfortunately considerably greater.

It is impossible to generalize about working conditions, wages, and the standard of life, as there are enormous variations from area to area and from industry to industry, but certain tentative statements may be made.

It is universally agreed that the standard of life of the masses in India is extraordinarily low, and that millions obtain only the barest necessities of life. Wages cannot be usefully compared owing to the differences in the purchasing power of money, in the wage systems, and in

<sup>1</sup> Over 80 per cent. in the textiles.

tastes and needs of the workers. In India, as in Japan, wages are paid only partly in money, a considerable part consisting in concessions or payments in kind, such as free or cheap housing accommodation and food at reduced prices. In addition, various bonuses or special payments are made from time to time. In Japan the commutatory system prevalent in the cotton industry makes comparison particularly difficult. It can, however, be said that a series of special inquiries into the budgets of industrial workers supports the view that earnings are definitely higher in Japan than in India, and in India than in China.<sup>1</sup>

Working conditions in India vary as greatly as wages and the standard of life. They are best in the larger factories, less good in the seasonal and smaller factories, and worst of all in the unregulated factories and workshops, where child labour is still seriously abused.<sup>2</sup> Some factories have up-to-date, well-fenced machinery and undertake considerable welfare work, whilst others are very backward and merely comply with the legal requirements. There is little, if anything, to compare with the 'model' factories of Japan. Conditions of work have improved recently, especially since the Factory Act of 1922. The Whiteley Commission<sup>3</sup> concluded that during the first thirty years of this century, that is, until the onset of the present depression, there was also a marked improvement in earnings and conditions of life, deplorable though those still are.

Industrial legislation started relatively early in India, the first Factory Act being passed in 1881. This limited the age of employment of children, provided for the appointment of inspectors, and laid down regulations for sanitation and the protection of machinery. Legislation originally received stimulus from fear of 'Indian competition' in

<sup>1</sup> This conclusion follows mainly from a comparison of the percentage expenditure upon food.

<sup>2</sup> Children may not be employed in mines under 13 years or in factories subject to legislation under 12 years, but children of only 5 to 6 years are to be found in unregulated workshops.

<sup>3</sup> *Report of the Royal Commission on Labour in India*, 1931, Cmd. 3883.

Lancashire, but when information became available as to the conditions of life and work, the movement was based upon honest sympathy and humanity in both England and India. The important Act of 1911 limited the hours of adult males as well as of women and children. During the War exemptions were freely granted to allow for night work and extended hours, but afterwards, especially after the International Labour Conference at Washington in 1919,<sup>1</sup> the need for further legislation and stricter administration was realized, and resulted in the Factory Act of 1922, the ratification by India of the International Hours Convention,<sup>2</sup> and the Mines Act of 1923. This last Act prohibited the employment underground of children under 13 years of age, limited adult hours of work to 60 per week for surface workers and 54 for underground workers, and led to an order by which from 1929 onwards women's work underground is being gradually reduced and will finally cease in 1939. In 1928 a daily limit of 12 hours was imposed.

Thus in India, as in Japan and China, the International Labour Organization proved a turning-point in industrial legislation, and has had a great psychological influence. National pride has been touched, and public opinion tends to favour efforts to level up Eastern and Western conditions.

The Act of 1922, with minor amendments, remained in force until January 1st, 1935, when the Consolidating Act of 1934 replaced all former factory legislation. The Act of 1922 fixed a maximum of 60 hours per week and 11 per day, exclusive of one hour's compulsory rest interval, for adult men and women, and a maximum of 6 hours for children (of 12 to 15 years of age). The Act of 1934 reduces hours to 54 per week and 10 per day, except in

<sup>1</sup> India is represented on the Council of the International Labour Office as one of the eight chief industrial Powers.

<sup>2</sup> This convention has not yet been ratified by either Japan or China. India has now ratified 14 of the 62 conventions adopted by the International Labour Conference between 1919 and 1937. International Labour Office, *Industrial and Labour Information*, Jan. 3rd, 1938.

seasonal factories (60 hours per week and 11 hours per day for males). This compares with 11 hours per day, including 1 hour's rest, in Japan, for women and children (of 14 to 16 years). But in Japan a certain amount of overtime is permitted even for women and children, and men's hours are unregulated.

Until 1926<sup>1</sup> Japanese legislation was less strict than Indian, and gave Japan a competitive advantage. At the present time, however, Japanese regulations for women and children (but not for men) are very similar, although it is frequently asserted that the law is not so well enforced in Japan, especially in factories outside the large cities. In practice the actual hours worked are usually less than the maximum hours permitted, and it is of course the former that matter. In India a 54-hour week was common even before 1935, whilst a substantial number of firms, especially in the heavy industries, have a 48-hour week. The textiles, however, until 1935 normally worked the full 60-hour week, and the shift system is seldom used. Japan undoubtedly gains a considerable competitive advantage from her shift system, and from the fact that she employs a much larger proportion of young girls.

The recent Factory Act arose out of the findings and recommendations of the Royal Commission on Labour in India, whose chief recommendations were that hours should be reduced; that certain essential regulations should be extended to premises at present unregulated; that the law should be more strictly enforced in seasonal factories; that inspection should be improved, and that the labour functions of the sardars, jobbers, &c., should be eliminated.

The legislation described above refers only to British India. Most of the Indian States have some factory legislation, but very few (Mysore is one of the exceptions) have as high a standard as British India. Many have provisions similar to the British Indian Act of 1911. The growing disparity between legislation in British India and the Indian States, besides being intrinsically undesirable,

<sup>1</sup> In certain respects until 1929 or 1931.

offers a direct inducement to the establishment of factories in Indian States rather than in British India.

The Indian Trade Union movement started during the last quarter of the nineteenth century in connexion with the agitation for factory legislation, but did not take strong root until after the War, when there was a period of great unrest among industrial workers. Since then the movement has gained in strength, and has helped to secure important concessions for the workers, especially in the Bombay Presidency. Its great weaknesses have been the transitory nature of many of the Unions, the lack of working-class leaders, and the lack of co-ordination. A Trades Union Congress was founded in 1920, but since then has split into several sections. The movement has not been opposed by the Government, and the Act of 1926 provides for the voluntary registration of Unions and for protection as regards civil and criminal liabilities for registered Unions and their members. One hundred and ninety-one Unions, with a membership of 208,000, had registered in 1933-4.<sup>1</sup> Transport workers are the best organized, textile workers (except in Madras and Ahmedabad) being surprisingly backward. The Trade Disputes Act of 1929 and the Workmen's Compensation Act of 1923 are other examples of recent labour legislation, but no steps have yet been taken to introduce social insurance of any type.

As has already been said when dealing with the labour element in industrial production generally, comparisons of labour efficiency, like those of standards of living, are not at present obtainable. But although it is impossible to measure the comparative efficiency of labour directly, owing to differences in processes adopted, organization, machinery, and quality of the raw materials used, all authorities agree that the efficiency of the Indian industrial worker is low, much lower than that of the Japanese for example.

It has been calculated that on an average 30 to 33 operatives are required per 1,000 spindles (for all counts averaging 20's) in an Indian mill, as compared with 18 in a

<sup>1</sup> Only about 1.5 per cent. of the registered membership is female.



Japanese mill; and that in ring-frame spinning a competent tenter attends two sides of a ring frame in Japan, but in India and China only one side. Moreover, the output per hour per spindle and the number of looms tended per operative are less in India than in Lancashire or Japan. Definite figures have been suggested by various authorities on the matter,<sup>1</sup> but are not quoted here on account of their incompleteness and the difficulty of obtaining exactly comparable conditions. Nevertheless, all authorities agree that India is at a disadvantage in this respect. It may be added that great opposition has been raised to efforts to get weavers to attend more looms. In coal-mining and iron and steel production a similar state of affairs exists.

Many explanations have been advanced to account for the low standards of output and of efficiency of Indian workers. They include the heavy labour turn-over and irregular attendance, the workers' ignorance and lack of familiarity with machinery and labour-saving appliances, and the general slackness, poor physique, and lack of initiative. Undoubtedly there is at present in India the same vicious circle which we have seen existing in China—the low wages and standard of life leading to ill health, irregularity and inefficiency, and inefficiency perpetuating low wages. In addition, slack discipline and bad organization reduce output per head. Due weight must also be given to India's climatic disadvantages, which have their effect upon the energy of managers and salaried workers as well as of manual labour, and which in some parts at least predispose to ill health.

Finally a few words may be said about industrialization and the population problem. It is well known that India, like China and Japan, is still at a stage characterized by high birth, death, and sickness rates. The Indian population has probably almost trebled since the early nineteenth century, and increased from 318·9 to 352·8 millions between 1921 and 1931 (i.e. by 10·6 per cent.). It is generally agreed that there is a tendency for any improve-

<sup>1</sup> e.g. Pearse, *The Indian Cotton Industry*, and Lokanathan, *Industrial Organization in India*.



ment in production to lead at present to a proportionate, or at least closely corresponding, increase in numbers, so that economic improvement results in keeping alive larger numbers, rather than in raising the standard of life. The population problem is undoubtedly the crux of the problem of poverty, and, although not so persistently brought to the fore in relation to India as in relation to Japan, is perhaps no less vital for the former than for the latter.

## CHAPTER III

# INDIA'S INDUSTRIAL FUTURE

### I. COMPETITIVE POSITION AND INDUSTRIAL POTENTIALITIES

INDUSTRIALIZATION has up to the present been <sup>1</sup>slow and tentative in India. Progress has been greatest in the home market, and even here protective tariffs have proved essential. It is therefore still questionable whether or not India is on the path towards far-going industrialization. Is it merely a question of time before she treads the Western path, or are there certain inherent factors, physical, racial, or social, which will necessarily limit her industrial advance? To what extent and in what directions will she compete in foreign markets? What opportunities will her own markets offer to countries exporting manufactured goods?

In addition to the defects already discussed in the spheres of organization, finance, and labour supply which have restricted industrialization in the past, there have been other limiting factors of a more general character. The mere size and vast population of the 'sub-continent of India' have made the problem of introducing modern methods more formidable than in a small and compact country like Japan. The exceptional inertia, arising from the social and political systems and institutions peculiar to India, has also acted as a brake on progress. In particular the existence of an alien Government has led to suspicion of, and at the same time to undue dependence upon, Governmental action and leadership. Nor must so purely physical an influence as that of climate be overlooked. The effect of the tropical climate prevailing over the greater part of India not only reduces human labour efficiency, but is said to be often detrimental to the smooth running of machines and of certain important manufacturing processes such as the spinning of vegetable fibres. From the point of view of industrialization, India ranks high in

comparison with other countries subject to similar climatic conditions, but that these conditions are a strong limiting factor should be kept well in mind.

On the other side of the picture India, like Japan but unlike China, already possesses a high degree of economic unity, and modern facilities for communication and transport. She is well situated as regards natural resources, having plentiful supplies of the raw materials needed by her chief industries such as cotton, jute, and iron ore, as well as good resources of motive power, although her coal and mineral oil have the disadvantage of being highly localized,<sup>1</sup> and the generation of hydro-electric energy is still limited and expensive in comparison with certain other countries, including Japan. In addition it is clear that the articulate classes are overwhelmingly favourable to industrialization.

The trend of industrial development in India and in Japan is likely to be altogether different. India's large area and varied resources render her potentially capable of developing a 'balanced economy' like that of the U.S.A., that is of becoming self-sufficing as regards foodstuffs, primary minerals, and industrial products, with an immense home market for manufactures, provided only that the standard of life can be raised. Japan is dependent upon imports of various raw materials and foodstuffs, which means that—if income and population are to continue to expand—she will be bound to export increasing quantities of manufactured goods. The question is, what will be the reactions on industry and trade if this capacity on India's part to develop a 'balanced economy' becomes a realized fact?

Trade statistics show that India is already tending to self-sufficiency as regards a number of goods previously imported. The outstanding example is cotton piece-goods, whilst the development of the iron and steel, engineering, matches, cement, and sugar industries points in the same direction. Sir George Schuster in 1935 drew attention to the

<sup>1</sup> The bulk of the mineral oil is, of course, produced in Burma, which since April 1937 has become a separate political entity.

standard of life be raised even slightly this would involve a huge new demand for the conventional necessities and luxuries of civilized life.

The great decline in Great Britain's share of the Indian market may easily create an erroneous impression of a decrease of the Indian market as a whole. The change has been, however, in direction rather than volume and the following table shows the important alteration in the distribution of India's foreign trade from the pre-war period to the present time:

### DISTRIBUTION OF INDIAN TRADE<sup>1</sup>

(Percentages)

#### IMPORTS

	<i>Pre-war</i>	<i>War</i>	<i>Post-war</i>					
	<i>1909-14</i> (average)	<i>1914-19</i> (average)	<i>1919-24</i> (average)	<i>1925-9</i> (average)	<i>1932-3</i>	<i>1934-5</i>	<i>1935-6</i>	<i>1936-7</i>
U.K. . . . .	63	56	58	49	37	41	39	38
Rest of British Empire	7	9	7	8	8	8	10	11
U.S.A. . . . .	3	7	8	7	9	6	7	7
Japan . . . . .	2	10	7	7	16	16	16	17
Java . . . . .	6	8	7	6	3	1	1	0.3
Germany . . . . .	6	1	3	6	8	8	9	10
Other countries . . . . .	13	9	12	17	19	20	18	17

#### EXPORTS

U.K. . . . .	25	31	24	25	28	32	31	32
Rest of British Empire	16	21	17	14	18	14	15	14
U.S.A. . . . .	8	12	12	11	7	9	10	10
Japan . . . . .	8	11	13	12	10	16	13	15
France . . . . .	7	4	5	5	5	4	4	4
Germany . . . . .	10	1	5	8	6	5	6	5
Other countries . . . . .	26	20	24	25	26	20	21	20

War conditions led, as the figures show, to a wide replacement of European by Japanese and American goods, and even when the relative importance of Japan somewhat declined Britain continued to lose her former lion's share of the Indian market, while Germany tended to regain her pre-war position. Instead of a great excess of exports to India by 1931-2 the trade in both directions had become practically equal; and in 1936-7 India's exports to Great Britain actually exceeded in a considerable proportion<sup>2</sup> her imports therefrom. The loss of markets for

<sup>1</sup> Trade in merchandise, on private account only.

<sup>2</sup> 65 to 48 crores of rupees.

British goods in India was due primarily to the continuous decline in cotton goods, but Great Britain's share of most of India's other imports also declined. What Great Britain lost, other countries gained. Even in the cotton-goods trade this is true to a certain extent. Until 1929 the Indian market for manufactures as a whole steadily increased, and even during the depression the quantity of many manufactured imports was greater than before the War. For instance, imports of chemicals were in 1936-7 three times their pre-war quantity and value, whilst imports of motor-cars increased from 2,880 in 1913-14 to 19,567 in 1928-9.<sup>1</sup> The decline in Great Britain's share of the Indian market has recently been checked. It rose from 35.5 per cent. in 1931-2 to 41.2 per cent. in 1933-4;<sup>2</sup> since then it has lost part of the ground regained, and stood at 38.4 for 1936-7.

The table set forth here illustrates changes since

CHANGES IN THE SOURCE OF SUPPLY OF IMPORTANT  
MANUFACTURED IMPORTS<sup>3</sup>

(Percentages, based on value)

		U.K.	U.S.A.	Germany	Japan	Belgium	Italy
Cotton manufactures .	1913-14	90.1	0.4	2.1	1.8	..	..
	1936-7	50.7	..	0.3	43.2	0.1	0.2
Iron and steel goods .	1913-14	69.9	2.6	14.5	..	10.0	..
	1936-7	49.7	1.5	12.0	7.8	14.1	..
Machinery . .	1913-14	89.8	3.3	5.6	..	..	..
	1936-7	65.5	8.9	14.2	1.3	2.2	0.9
Mechanical vehicles .	1913-14	71.3	15.1	..	..	4.5	..
	1936-7	41.9	38.2	6.0	..	..	1.1
Instruments, &c. .	1913-14	75.3	8.0	8.2	0.6	..	..
	1936-7	50.1	17.5	15.8	6.0	1.0	0.7
Chemicals . . .	1913-14	74.7	0.3	12.4	1.5	..	5.2
	1936-7	54.0	5.0	13.2	10.4	..	3.6

<sup>1</sup> 12,939 in 1936-7.

<sup>2</sup> This may be partly attributable to the Ottawa Agreements, but the cessation of the boycotting of British goods and the adherence of India to the 'sterling group' were important factors.

<sup>3</sup> Compiled from the *Review of the Trade of India, 1936-7*, and the *Indian Trade and Navigation Accounts, 1936-7*.

1913-14 in the sources of supply of the chief manufactured imports. These facts and figures support the view that, provided the present depression does not continue indefinitely, the Indian market for manufactures as a whole is likely to increase, although the demand for particular articles may decline.

On the export side changes in the direction of trade have not been so striking. It may be noted that the shares of Britain and of the rest of the Empire tended to increase even before Ottawa. As to the composition of the export trade the percentage of manufactured and partly manufactured goods to total exports showed an increase from 17 in 1904 and 23 during the pre-war period to 27 for the post-war period and for 1929, since when it has declined slightly to 25 in 1936-7. The increase has been divided between a fairly large number of goods,<sup>1</sup> and at present only the jute, and to a lesser extent the leather, industries cater primarily for export.

It can be concluded that, apart from the iron and steel industry, few Indian industries are likely to expand their overseas markets rapidly in the near future, but that the general tendency is towards the increased export of miscellaneous manufactures.

It will be useful from the point of view of this study to classify Indian trade with particular countries according to whether it is predominantly 'complementary' or 'competitive'. In general terms it can be said that Indian trade with Britain, with the rest of the Empire, and with the U.S.A. is predominantly complementary, while that with Japan, China, and continental Europe is largely competitive.

Great Britain sends chiefly high-quality goods to India which cannot at present be manufactured there. Even those, e.g. cottons and steel goods, which are subject to protective duties are in the main of a different quality from that of home products. In return India imports tea, raw and manufactured jute, oil-seeds, hides and skins, pig-iron, and raw cotton. The U.S.A. is in a very similar posi-

<sup>1</sup> Cf. p. 259, above, for a list of the principal manufactured exports.

tion, though the actual commodities differ in relative importance. The Dominions take mainly jute goods, tea, and rice, sending in return manufactures, coal, &c. The tropical colonies, e.g. Ceylon, Malaya, tropical Africa, and the British West Indies, also have complementary trade: Ceylon and Malaya, for instance, send spices and other specialities, and take in return such products as rice, cotton and jute goods, and tea; Kenya sends raw cotton, and takes cotton and jute goods.

On the other hand continental Europe sends chiefly cheap manufactures, which compete with those produced in India. The trade with China is also largely competitive, and has changed remarkably since the pre-war period. Whereas total imports from China have increased, exports to China have notably declined. Before the War the chief exports to China were cotton yarn (about 50 per cent. of the total), jute goods, raw cotton, and tea, whilst China sent chiefly raw and manufactured silk. To-day Indian yarn exports to China have, as we have already seen in the chapter on Chinese industrialization, practically ceased, and India sends chiefly rice, raw cotton, and paraffin wax, receiving in return raw and manufactured silk, and cotton yarn. A large export of cotton yarn to China has therefore been replaced by a considerable import.

The outstanding example of competitive trade is, of course, that with Japan. The table on page 310 gives the chief items of trade before the War and in 1936-7.

This table shows the immense increase of Japanese exports to India, despite the depression.<sup>1</sup> Textiles as a whole accounted for 75 per cent. of the total in 1932-3, but for only 58 per cent. in 1936-7—cotton and artificial silk alone accounting for 52 per cent. Practically all the Japanese textiles sent to India, and a large proportion of the other goods, may be considered as competitive.<sup>2</sup> In

<sup>1</sup> Japanese exports to India fell heavily in 1933-4, when the Indian duty on non-British piece-goods was raised to 75 per cent., but the Indo-Japanese trade treaty led to a resumption of trade expansion.

<sup>2</sup> Articles not in the table include glassware, hardware, haberdashery,

TRADE BETWEEN INDIA AND JAPAN<sup>1</sup>

## A. VALUE OF IMPORTS INTO INDIA FROM JAPAN

(In lakhs of rupees)

	<i>Pre-war average</i>	1932-3	1933-4	1936-7
<i>Cotton goods:</i>				
Hosiery . . . . .	65	61	72	29
Piece-goods . . . . .	6	7,85	4,43	5,58
Yarn . . . . .	6	1,61	95	1,37
Other types . . . . .	2	12	8	31
1. Total cotton goods . . . . .	80	10,19	6,18	7,55
2. Silk manufactures . . . . .	1,31	2,01	2,11	1,30
3. Earthenware and porcelain . . . . .	4	31	26	27
4. Boots and shoes . . . . .	..	31	32	7
5. Artificial-silk goods . . . . .	..	2,70	1,56	3,53
Total imports . . . . .	3,64	20,47	16,35	21,27

## B. VALUE OF EXPORTS FROM INDIA TO JAPAN

1. Raw cotton . . . . .	14,50	11,12	10,52	25,41
2. Rice . . . . .	1,33	62	..	36
3. Iron and steel goods . . . . .	15	52	66	96
4. Hides and skins (tanned or dressed) . . . . .	13	20	21	23
5. Jute, raw and manufactured . . . . .	22	47	38	1,25
Total exports . . . . .	16,84	13,95	12,61	30,07

fact Japan can supply India with an ever-widening range of cheap manufactures at prices at which Indian and European goods cannot, without very heavy protection, compete.

Finally it may be emphasized that the cotton industry is the Indian industry which at present chiefly affects international industrial competition, and which competes in international markets. The iron and steel industry, already important, is of still greater potential importance, as India may well become one of the chief exporters in the

apparel, toys, and instruments and apparatus; also paper, chemicals, umbrellas, rubber goods, cement.

<sup>1</sup> Table prepared from the *Annual Review of the Trade of India, 1936-7*.



world of certain types of iron and steel products. In what proportion India's iron and steel products will prove competitive or complementary in relation to British products depends upon the extent to which the principle of Imperial specialization triumphs over that of national self-sufficiency.

## 2. POLITICAL FACTORS AFFECTING INDIA'S INDUSTRIAL FUTURE

It is impossible to discuss India's industrial future without reference to political factors. It is true that the extent of industrial development depends primarily upon the progress made in raising the standard of life of the masses, both the agriculturists and those in the cities, that the raising of their standards depends in turn upon radical changes in social habits and customs, and that these essential changes can be effected only by the people themselves and not by any outside ruling Power. But although this is clearly the fundamental factor in the industrial outlook, it is equally true that political developments under the new Constitution will largely shape future economic policy, and, to some extent, economic conditions in the country, while external political relations, especially those with the United Kingdom and with the British Empire as a whole, will also play an important part.

This connexion between the political and the economic development of India is too vast, and the political future too undefined, to allow of more than a few generalizations, and all that will be attempted here is to indicate a few of the main political factors and problems likely to influence economic developments and policy. The discussion will proceed on the assumption that federation will become an accomplished fact, and that Provincial Autonomy, established in April 1937, will be worked as intended. Should this assumption not be fulfilled the situation would be such that economic, including industrial, development might be held up indefinitely.

Political conditions within the country, and consequently economic conditions and policy, will depend

fundamentally upon the distribution of power between the various communities and classes.

The franchise has been extended and communal electorates retained. But the franchise is still limited to a comparatively small proportion of the population, and the fear has been expressed by some political leaders that the result will be inimical to the interests of the masses of the population, i.e. that the new Government will be more 'capitalistic' than the Government has been in the past. This may lead to increased unrest among industrial workers and possibly hinder the extension of social services of labour legislation. The peasants, also, may be adversely affected, but on the other hand it is quite possible that a 'country party' may arise and counterbalance *zamindari* interests.

Even if at least as much weight is given in the future as in the past to the interests of the masses, the actual policy pursued—as regards both objectives and methods—will still depend on the distribution of power and the nature of the political parties which develop.

It is difficult to predict what will be the result of the maintenance of communal electorates on the development of political parties. Will parties develop with platforms based on broad principles, giving considerable weight to economic matters, or will the parties be based on communal divisions, thus splitting up between the parties the advocates of particular types of economic policy? Will it be possible to arrange for co-operation in economic matters, so that an economic programme can be passed and carried out without unreasonable delay? Or will parties develop simply based on personal leadership? At present the new Provincial Ministries, although still in the main based on communal affiliations, are introducing programmes which emphasize the need for economic reforms.

Even if some method of carrying out a definite economic programme can be devised, the question still remains—what will be the relative power of different, and in some cases opposed, economic interests and classes? There is,

for instance, an obvious cleavage of interests between agriculturists and consumers, on the one hand, and the great merchants and industrialists, on the other hand, on the question of tariffs. If the latter obtain predominant power they may inaugurate a policy of extreme economic nationalism, regardless of the cost to consumers. A similar cleavage might develop with regard to currency policy. It has been the Bombay merchants and industrialists who have, in the past, pressed for a return to the 1s. 4d. rupee. It may be noted that the Reserve Bank Act repeats the previously existing regulations with regard to the exchange, maintaining the 1s. 6d. rupee, but obviously this policy might be changed.

Until the basis of party formation and the comparative strength of the parties formed both in the Provinces and eventually at the centre become clearer, any attempt to predict the trend of economic policy can be little more than guess-work. The opinion has been expressed already that industrialization will be the goal pursued, but the rate and methods adopted depend on the comparative strength of the various parties and also on the financial situation. One of the chief factors limiting Governmental action in the industrial sphere in the past has been lack of revenue, and if the new Constitution leads to a reduction of taxation, less efficient or less economic administration, and any reduction in the security of foreign or Indian capital, the financial problem will be greatly aggravated. On the other hand it is conceivable that self-government will make possible new economies and the tapping of new sources of revenue. It is also conceivable that self-government will lead to social reforms tending to promote economic enterprise which an alien Government would never dare to introduce.

Fears have been expressed that federation will increase the expense of civil government, and hence necessitate increased taxation. It has, however, been estimated that the extra expense involved will amount to only about Rs. 1.5 crores on account of the new machinery of federal administration. This sum is raised to Rs. 8.7 crores (or

about £6½ millions) if the loss on account of the proposed arrangements with the Indian State, the assistance granted to certain Provinces, and the loss on account of the separation of Burma are included. Meanwhile a federal system, with sufficient central authority to be able to plan on a national basis for the raising of the Indian standard of life, would seem to be a prerequisite for any substantial improvement in the condition and efficiency of the industrial worker and hence of industrial output.

Finally there is the important question of future relations between India, the United Kingdom, and the rest of the Empire. It has been shown above that of recent years commercial policy has tended in the direction of closer co-operation, on a preferential basis, between India, Lancashire, and other parts of the Empire. In addition a trade agreement was signed before the separation of Burma (in April 1937) maintaining for three years free trade between Burma and India, and providing for close co-operation with regard to tariff policy. Much greater developments may be expected in the future if this policy is pursued with vigour.

Nevertheless objections have been raised in India against Imperial preference and the Indo-British Trade Agreement, and the negotiations for a new agreement have proceeded slowly and with difficulty. Hence the possibility of the complete abrogation of the Ottawa Agreement, and of the raising of tariffs against British goods, must not be overlooked.

The position of foreign capital and enterprise in India is also uncertain. Many Indians favour the imposition of restrictions on foreign capital and enterprise.<sup>1</sup>

It is of course true that the new Constitution for India includes clauses to prevent discrimination against British subjects and companies, but it is also true that even without the actual repeal of these commercial safeguards it would be possible to make things 'uncomfortable' for British traders. The success of boycotting at certain

<sup>1</sup> Note for instance the proposed (but at the time rejected) reservation of coastal shipping to Indian companies.

periods in the past is sufficient to prove that in the last resort the only real safeguard lies not 'in a paragraph of any Constitution, but in an active policy of co-operation and goodwill'.<sup>1</sup> Any reaction against the present policy would not only affect British trade and traders adversely, but would also tend to deprive India of the use of imported capital, and to decrease her chief export market. Provided that there is no question of exploitation, the use of British capital on easy terms, the presence of experienced European *entrepreneurs*, and the continuance of well-established businesses are obviously in India's interest. Unfortunately there is reason to suppose that the interdependence of British and Indian economic interests is still insufficiently realized, and much remains to be done to bring home to the public the great extent of the common interests of the two countries.

### 3. CONCLUSIONS

The industrial position of India and the chief factors affecting industrial development have now been reviewed. Defects have been noted in a number of spheres, but it has been pointed out that many of these are remediable, given political and economic stability, and increased co-operation between the various interests and classes concerned. The present economic policy tends to encourage Imperial co-operation, and also to increase the security of industrial enterprises, both foreign and Indian, and hence the confidence of investors. Although India will for long need capital from abroad, that capital should be forthcoming on reasonable terms provided that political and social conditions are not upset. The new Reserve Bank and credit policy should help to co-ordinate India's various financial agencies and develop their functions along sound lines. Moreover, since depression has given way throughout the world in general to a period of higher prices and greater economic, and particularly industrial, activity, if only means can be found of re-establishing freer international

<sup>1</sup> *The Times*, July 24th, 1934.

exchange, a revival of trade corresponding in extent to the revival within national boundaries may be expected. India is in an exceptionally good position for taking advantage of any such revival. Amongst the signs of recovery may be included the recent relative rise in the level of prices of Indian exports as compared with imports, the fact that consumption of necessities has been maintained, and finally a sound financial position.

The last was secured, without resort to inflationary borrowing, by means of the emergency measures of 1931, based on the orthodox principles of retrenchment and increased taxation, after only two years of budgetary deficits. In his last budget (1934) Sir George Schuster introduced more permanent revenue measures, and provided for the gradual termination of the emergency measures of 1931. Sir James Grigg has, on the whole, continued the same policy, and the situation improved to such an extent that it was possible to provide adequately for the additional expenditure involved by the partial coming into force of the new Constitution, and yet to make special non-recurring grants for rural development and allied objects. The situation in 1937 was in some respects disappointing, owing to an unexpected decline in revenue from certain sources, but the budget for 1938 showed considerable improvement, so that in the near future it will be possible not only to shoulder the extra burdens involved by federation, but also to restart capital and constructive expenditure. Certain steps have already been taken in this direction. An economic programme has been determined upon, and measures—such as the appointment of Indian Trade Commissioners in several foreign centres, and revision of the Companies and Insurance Laws—have been taken which should facilitate the expansion of industry and trade. Whatever may be thought about the advisability of this type of ‘sound finance’, the fact remains that, if the corner has been turned, the disadvantages will have been suffered in the past, and that India will in the future be in a position either to spend an increasing revenue on ‘nation-building ob-

jects' or to reduce taxation, or both, instead of having to repay loans.<sup>1</sup>

On the other hand, the reforms and possible developments indicated will all take time. Not only has there been no rapid industrialization in the past, but there is little likelihood of any rapid stride in that direction in the future. Industrial progress in India depends fundamentally upon increasing the home market by a gradual rise in the standard of life, and on improving organization, management, and the efficiency of labour by patient education and training. Protection of home industries by means of tariffs will undoubtedly continue to be necessary.

The only direction in which rapid advance in competitive power in external markets seems likely is in the lower stages of the iron and steel industry, although a gradual increase in the export of miscellaneous manufactures is also probable. In India, as elsewhere, industrial progress cannot be divorced from political relations, and the great need is for the restitution of freer international exchange.

<sup>1</sup> Compare this with Japan's position. The budget for the financial year 1936-7 showed a deficit of 700 million yen covered by public loans; and since the beginning of the war with China in August 1937 the prospects of a balanced budget are farther off than ever.





V

GREAT BRITAIN



## CHAPTER I

### HISTORICAL NOTE ON BRITISH INDUSTRIAL DEVELOPMENT IN THE NINETEENTH CENTURY

THE parts of this book dealing with Japan, China, and India have in each case been prefaced by a short historical sketch, the inclusion of which appeared to be called for by the relative lack of knowledge possessed in the West of oriental industrial conditions. In coming to Great Britain, it is neither practicable on account of the space required, nor necessary for the instruction of the average reader, to repeat this procedure. It seems nevertheless desirable, both as a background for the following chapter of this part, and also to emphasize the difference in early environment between British industrialization and the Eastern industrializations dealt with in previous parts, to indicate briefly some of the major features of British economic development during the nineteenth century.

Great Britain's industrial structure has its roots in the series of changes in the eighteenth and nineteenth centuries usually comprehended in the title 'the Industrial Revolution'. These changes, which have since become general in Western countries, were at first confined to Great Britain—an important fact in determining her economic evolution all through the last century. By her early development of machinery and of a new type of industrial organization, Great Britain forestalled other nations in establishing modern industry and the large-scale export of manufactures. The cotton industry was the first industry to be organized under the new methods and it soon assumed international importance. As we have seen earlier in this book, the growth of the Lancashire power-looms robbed India more than a century ago of her traditional export trade in cotton yarn and cloth, in spite of a difference in the price of labour exceeding that of to-day.<sup>1</sup>

<sup>1</sup> To quote Charles Babbage, writing of conditions in 1832: 'at Calicut

Various advantages can be singled out to explain the remarkably long start which England obtained in the movement towards modern industrialism. Some were of temporary effect, others have endured to the present time. The ground was prepared, to begin with, by a long tradition of overseas trading, which in turn brought about a substantial accumulation of 'free' capital derived from the profits of trade and ready to flow into new fields of development. Political and social conditions in Great Britain were, moreover, such as to give an unusual degree of freedom to individual enterprise, financial as well as industrial, and the spirit of commercial adventure was itself markedly strong. Again, factory development was made easy by the possession of ample supplies of the coal needed for the generation of power and the smelting of metals.

Assisted by these and not a few other aids, British industrial development progressed at a rapid rate. Iron production, for instance, which in the middle of the eighteenth century amounted only to about 17,000 tons a year, increased between 1806 and 1844 from a quarter of a million to nearly a million and a half, while shipments of British coal grew from 4 million tons in 1819 to nearly treble this figure at the middle of the century. Foreign trade developed in harmony. Taking the eighteen years from 1831, we find total British exports growing from £37 million to £64 million, and cotton exports alone from £17 million to £26 million.<sup>1</sup> This industrialization involved for Great Britain a change of a radical nature in the character of her economy—a point to which special reference will be made in the following chapter—in the form of a movement away from self-sufficiency towards dependence on foreign trade for the supply of a large proportion of the country's requirements of foodstuffs. Thus the average annual imports of wheat in the decade 1840–50 were four times as great as in the decade of forty

. . . the price of labour is one-seventh of that in England, yet the market is supplied from British looms' (*The Economy of Manufactures*, p. 4).

<sup>1</sup> In 1800 exports of cotton fabrics had been just over £5 million.

years before (1800-10), though population in the interval had not so much as doubled. Accordingly Great Britain began to incline to an 'international', as opposed to a national, economic system, since her industrialization in the face of a world still predominantly agricultural presupposed a free flow of goods, raw materials, and food in return for exported manufactures.

Britain became, in fact, the 'workshop of the world'. Although the earlier days of the development of the export trade in manufactures had been marked by periodic crises and great fluctuations, as manufacturers engaged in a search for new markets to take the increasing supplies of goods made possible by the new technique, the first half of the century saw the development of a trade which supplied all parts of the world with manufactures, and against which the other nations could not compete. Such industrial supremacy, however, could not last unchallenged and in the second half of the century industrial competitors were rapidly coming to the fore. In Germany List denounced Britain's free-trade 'cosmopolitanism' as designed to appropriate industrial benefits to herself, leaving the rest of the world on the low standards of agriculture, and thus advocated the stimulation of industries in Germany under tariff protection; the practical results of his teaching followed in an era of State-aided industrial development during the Bismarck régime. The United States of America went through a rapid industrial revolution, again assisted by a policy of protection. France also embarked on industrial expansion.

The decade 1860-70 may be taken as approximately the high-water mark of British industrial supremacy. The report of the Royal Commission on the Depression in Trade and Industry of 1886 already contained recognition of the fact that the position of the past could only be maintained by means of far greater efforts than had been necessary heretofore, and in the last period of the century we see a relative slowing up in the rate of progress of the British exporting trade with a simultaneous acceleration in that of her trade rivals. In the last decade of the

century, for instance, the index of British exports showed an average annual rise of 2·7 per cent. compared with an annual rise of 5·8 per cent. in the previous decade and of 6 per cent. over the last half of the nineteenth century. In the first year of the new century British exports stood at £282 million, German at £227 million, and French at £164 million.

In competition with later arrivals in the field, Great Britain was handicapped by conditions arising partly from the very fact of her initial lead. Her fixed plant and settled organization represented a disadvantage when compared with the liberty enjoyed by countries unhampered by the past and able to profit both by the experience of others and by the most recent technical developments. The British economic and social structure had tended to crystallize, and the British asset of acquired manual skill was becoming offset by the results of scientific invention, of which Great Britain had no monopoly. Moreover, the free play of capitalism, which had assisted her industries at the start, was now becoming a characteristic of her rivals, reaction having taken place at home in the form of the growth of trade unionism and of collectivist legislation which—however necessary and desirable on other and more general grounds—deprived British industry of much of its earlier elasticity.

This lack of elasticity was accentuated by the comparatively narrow range of manufactures exported from Great Britain. Based, as it was, on the exploitation of a limited number of basic raw materials, the British industrial system and British foreign trade owed their development mainly to a few special types of production. Textiles and the heavy industries (coal, iron and steel, engineering, and ship-building) make up the major part of the British export trade throughout the nineteenth century. Although their importance in the total trade became slightly less, these groups of industries provided over 63 per cent. of the total value of exports in 1900; by 1910 the percentage was 58 per cent. and the industries in question still formed the backbone of the industrial system of the country.

A final factor to consider in tracing the rise and decline of the British export trade is foreign investment. Great Britain's importance as a foreign lender had an undoubted influence on her external trade in the second half of the nineteenth century. An international economic organization demanded a ready supply of capital for the development of new countries, and 'it was Great Britain . . . that displayed the greatest readiness to provide a steady flow of new capital by the reinvestment of profits, and to face the consequences of foreign investment both by accepting a growing volume of imports from the developing countries and by making the necessary readjustments in domestic economic organization'.<sup>1</sup> It was essential that she should find markets for her growing output of manufactures and sources of supply from which to draw food and raw materials, and the export of capital was closely linked to these needs. Foreign investment was on a large scale throughout the period, and undoubtedly a great deal of it led to the placing of orders for goods from British manufacturers. Railway enterprise<sup>2</sup> in newly developing countries was an outstanding example of the cases in which British foreign investment was 'very largely represented by orders to British manufacturers of railway materials and rolling stock'.<sup>3</sup>

Since the Great War British foreign investment has, however, changed its character. There has been a swing from long-term securities to short-dated loans, many of which became 'frozen' in the world depression. Meanwhile other countries began to lend freely. Perhaps the most important change has been the weakening of the former connexion between British loans and British exports through the growth of economic nationalism in the countries concerned. Divergences of opinion exist, it is true, in regard to the extent to which trade follows foreign investment, but all these changes in relation to the export

<sup>1</sup> League of Nations, *World Economic Survey*, 1931-2, p. 37.

<sup>2</sup> Of the total British investment abroad outstanding in 1913, that in railways constituted 41 per cent. *World Economic Survey*, 1931-2, p. 36.

<sup>3</sup> Hobson, *The Export of Capital*, 1914, pp. 7 and 15.

of British capital have probably had no small degree of influence upon the country's export trade.

Already, by the end of the nineteenth century, Great Britain, while still the leading industrial exporting nation, and, by means of her financial organization, still the medium for transacting a very great part of the business of the world, saw the limitations to further development becoming increasingly plain; and when the first decade of the twentieth century brought a phase of depression followed by a period of rising prices accompanied by much industrial unrest, it became clear that the easy prosperity of the nineteenth century had been definitely left behind. With the advent of the Great War, profoundly disturbing the whole economic structure and quickening adverse forces implicit indeed, but only half felt before, a new era began for the British exporting industries through which we must trace their fortunes in the following chapter.



## CHAPTER II

# POST-WAR CONDITIONS IN THE EXPORTING INDUSTRIES

BEFORE picking up again the thread of events, attention may here be drawn to a point of fundamental importance in considering what her export industries mean to Great Britain. She and Japan are at the present time facing a vital economic problem which is fundamentally one and the same for both. The essential factor conditioning Japanese development is a rapidly growing population, to support which it is necessary to develop an export trade in manufactures. Great Britain has reached a further stage in the evolutionary process. She has developed a national economy on the basis of an export trade supporting a large population at a higher standard of life than would be possible if the country were self-contained. She is now experiencing an arrest of the development of her export trade, on which she had become dependent for the maintenance of this standard of living. The position, therefore, is that, although the population of Great Britain, unlike that of Japan, is relatively stationary, the vital problem of 'subsistence' exists for her also. She must strive to maintain her population at its accustomed standard, and it seems that this can only be done by means of an active export trade enabling her to secure the necessary food and raw materials.

Unemployment, with which we shall deal later, is, of course, a prominent aspect of the problem, but in these introductory remarks it is well to lay stress on the fact that even increased employment, when confined to those occupations which provide goods and services for domestic use, fails to compensate for a contraction in the export industries upon which the country depends for the means of paying for its essential imports.

To revert now to the position directly after the War, we find a state of affairs in the immediate post-war period which was one of general European recovery from

war-time dislocation, followed by rapid industrial progress in the world generally. In 1925, which serves as a useful milestone in post-war economic development, the pre-war level of production in raw materials and foodstuffs had been regained, while industrial production, though it had not quite reached the pre-war maximum, was not less than the average of the last pre-war quinquennium.<sup>1</sup> The world's *per capita* production had increased, although not in a degree sufficient to maintain the pre-war trend. The position can be shown in tabular form:<sup>2</sup>

#### 1925 AS PERCENTAGE OF 1913

World population . . . . .	105
World production—food . . . . .	110
"    "    —raw materials . . . . .	125
Quantum of world trade . . . . .	107

The restitution of the pre-war level of production was not, however, the main problem of the period; the 'really difficult problems of the first post-war decade proved to be, not the increase of material production, but the balancing of effort and resources between countries and between industries, the reconstitution of trading relations, adjustments to the considerable shifts in income distribution caused by war debts and taxation, as well as to a greatly changed pattern of international indebtedness, and the rehabilitation of the world's badly damaged currency and banking systems.'<sup>3</sup>

World exports were rising, but the British share continued to decline, dropping from 14 per cent. of total world exports immediately prior to the War to 12 per cent. in 1925.

After 1925 the effect of the difficulties of industrial orientation and of international adjustment became accentuated and broke the even trend of development. World production, it is true, still continued to increase.<sup>4</sup> Progress was, however, no longer uniform. The comparative

<sup>1</sup> Loveday, *Britain and World Trade*, 1931, pp. 23 and 28.

<sup>2</sup> *World Economic Survey*, 1931-2, p. 23.

<sup>3</sup> *Ibid.*, p. 22.

<sup>4</sup> 1929 indexes with 1925 as base (= 100) were: France 130, Germany 122, Poland 138, Canada 154, to take a few examples.

prosperity of industrial nations was not shared by agricultural nations and the fall in the prices of staples, later to become crucial, began to make itself felt. Nor were primary commodities the only category for which the demand had declined. A general change in demand of extreme importance for Great Britain and similar manufacturing countries had set in. The prosperous industries in these countries were mainly those supplying new types of commodity—such as electrical apparatus, motor vehicles, or artificial silk—while those supplying the older staple products—such as cotton, woollen, and iron and steel manufactures—found themselves in a depressed state.

The causes of this change in consumption demand were complex. An important factor was an alteration in the distribution of income, resulting in relatively greater spending power for wage-earners and especially unskilled workers, who as a class would be likely to spend a greater proportion of their income on goods for consumption and to save less than those classes of the community who previously had commanded a larger share of the distributed wealth. In consequence of this, the demand for the capital goods supplied by the heavy industries had a natural tendency to decline.<sup>1</sup> At the same time, as a result of scientific and technical developments, the type of the goods themselves was changing; artificial silk tended, for instance, to replace cotton and wool. These changes were reflected in the character of world trade where the proportion of trade in raw materials to the total trade decreased. Between 1925 and 1929 the quantum of world trade in primary commodities rose by 15 per cent., while the increase in the trade in manufactured goods was double that figure, indicating the growing importance of secondary production. These changes in demand, affecting both goods and services, are regarded in some quarters as

<sup>1</sup> Professor Pigou suggested in 1927 that this might be an important factor in modifying the normal scale of the heavy industries supplying capital goods. See *The Economic Position of Great Britain* (Royal Economic Society Memorandum No. 1), p. 10.

constituting the most radical breach with the pre-war economy of Great Britain.

As a leading producer of capital goods and of the older staples, Great Britain was one of the nations which suffered most from this changed character of demand. She had in addition her own peculiar problems. One of the most important changes precipitated by the War occurred when countries which had formerly been markets for British manufactures, finding themselves shut off from the usual source of supply, began to manufacture for themselves. A notable instance is cotton manufacture, which developed strongly in the East; other examples are the iron and steel industries, railway plant, and wool textiles. The Balfour Committee regarded this rise of manufacturing activity among old customers as being 'perhaps the most important permanent factor tending either to limit the volume or to modify the character of British export trade'. Thus in the period after the War Great Britain lost markets, not only through changes in demand and the impoverishment of her customers, but also by the latter's emergence as rival producers themselves.

Several of Great Britain's chief export industries had, meanwhile, expanded greatly during the War. Because of war-time demand her heavy industries—mining, iron and steel production, ship-building, and engineering—had grown well beyond normal peace-time requirements.<sup>1</sup> In the case of the cotton industry there had been an excessive expansion already between the years 1907 and 1912, so that by 1913 there was a recognized surplus capacity and the contraction which followed during the war period represented a normal decline apart from the reaction from the exigencies of war. Almost all the other staple industries, however, showed an expansion both in plant and personnel at the end of the War, so that in 1919 they were

<sup>1</sup> Part of the expansion in the labour force in 1919 can, however, be attributed to the return of soldiers to their old occupations, supplementing the new recruits who had taken their place in industry. Thus, in coal-mining, the peak year of *production* was 1913, but the labour force was greater after the War than before it, largely for this reason.

faced with conditions of excess supply of labour and a redundancy of plant which would have constituted a serious problem even had the post-war demand proved to be up to the peace-time normal. As events turned out demand fell below the pre-war level, and the existence of labour surplus in the industries concerned is one of the most serious of Britain's problems to-day,<sup>1</sup> while the presence of surplus capacity was to be a factor of primary importance in the post-war history of the industries concerned.

This war-produced maladjustment in the relative growth of different industries tended, of course, to correct itself when the principal cause was removed, and the process of readjustment began at a fairly early date. Figures published by the Ministry of Labour showing the numbers of insured persons in the separate industries afford a means of measuring the reversal of the movement which had led to the overstocking of the heavy industries. The following table shows the reaction from the over-development of war-time industries which occurred in the six succeeding years after 1921:

CHANGES IN THE NUMBER OF INSURED PERSONS ATTACHED TO VARIOUS INDUSTRIES IN GREAT BRITAIN BETWEEN JULY 1921 AND JULY 1927<sup>2</sup>

I. <i>Declining industries</i>			II. <i>Expanding industries</i>		
	<i>Absolute decrease</i>	<i>Decrease per cent.</i>		<i>Absolute increase</i>	<i>Increase per cent.</i>
Engineering .	66,560	26.1	Distributive		
Ship-building .	53,940	20.5	trades .	327,090	10.0
Coal-mining .	44,590	19.4	Road transport	49,840	3.6
Iron and steel .	16,440	21.4	Motor manu-		
Marine			facture .	41,030	7.8
engineering .	8,410	30.1	Electrical		
Chemicals .	8,490	47.6	engineering .	18,340	12.8
			Artificial silk .	17,770	8.3

<sup>1</sup> See below, pp. 345-6 et seq.

<sup>2</sup> The movement in more recent years will come to be considered in Chapter III, dealing with unemployment, but it may be recorded here that

The contraction of the first group of industries and expansion of the second is not to be explained entirely by a 'switch-over' of workers. Migration, of course, occurred, but failure to renew the wastage of labour in the first group and the tendency for the rising generation to gravitate to the second would account for a great deal. Here, it may be noted, Great Britain is at a disadvantage compared with Japan, who, as has been pointed out, enjoys a much greater resiliency of labour so that readjustments of this sort can be effected more rapidly and with less strain. The process was thus a slow one, the necessary changes being impeded by various elements of friction. The same is true of the reduction of superfluous plant; it was not until the stress of depression became accentuated that there was any considerable reduction of surplus capacity either in labour or plant.

Financial difficulties also played their part in crippling British industries, many of which found themselves seriously involved soon after the War. This was due partly to the short-lived boom, based almost entirely on inflated prices, whose rapid collapse served to accentuate, rather than to solve, the problems left by the War. A great deal of the equipment was installed during the War at very high costs, while the subsequent price-boom led to further expansion of plant installed at exaggerated values. With the collapse of the boom firms were faced with the necessity of capital reorganization if they were to have any hope of earning profits in the future. In the cotton industry the boom had been especially sudden and vigorous and had resulted in a great deal of speculative re-financing which afterwards could not be disposed of by the comparatively easy method of writing down balance-sheet values.

Professors Daniels and Jewkes<sup>1</sup> calculate that by July 31st, 1920, a proportion of the cotton industry represent-

since 1927 the 'declining' industries have declined still farther and the 'expanding' industries have continued their expansion.

<sup>1</sup> 'The Post-War Depression in the Lancashire Cotton Industry' (in the *Journal of the Royal Statistical Society*, vol. xci, 1928, pp. 153 et seq.).

ing 46 per cent. of the spindles and 14 per cent. of the looms had been financially reconstituted. The peak was reached in March 1920, when the average price per spindle had risen to about £4, as against £1.4 in 1919 and £2.25 in the middle of 1920. The new financing took the form, for a great part, of bank loans and thus saddled the businesses with heavy charges in the form of fixed interest and later on, when the boom ceased, with a serious burden of 'frozen' bank credits.

This damaging financial position continued till about 1928, since when it has been very considerably alleviated by the writing down of capital and by the liquidation of heavily burdened companies, so that over-capitalization has lately become a somewhat less vital factor in the depression of the Lancashire cotton industry.

The year 1925 saw the beginning of a fresh set of difficulties for the British export industries arising out of Great Britain's restoration of the gold standard. The return to gold naturally involved deflation, which carried with it a falling price-level. In order to continue to produce at a profit the manufacturer had to reduce costs. Such a reduction can, however, only be brought about slowly in a country like Great Britain, where wages and interest payments are more than usually rigid. The result was bad for the British exporter, who, if he sold his goods at the usual price in a foreign currency, found himself in receipt of a reduced sterling sum, and was unable to counterbalance the reduction by a simultaneous lowering of costs. The result was an accentuation of the unemployment problem in the staple exporting industries.

The British exporting manufacturer was thus already handicapped when, in common with the rest of the world, he was faced with the universal fall in prices which preceded the world crisis. His difficulty in reducing costs to correspond with prices was mainly due to the inflexibility of wages. Wage-rates, of course, fall under the stress of depression and rise in conditions of prosperity. The response is slow, however, as it operates through the process of collective bargaining. Trade-union policy is



usually based on maintenance of the wage-level, even if this has to be achieved at the cost of some increase in unemployment. However justifiable this may be on other grounds, it involves a lag between the development of conditions which demand a change and the change actually occurring, so that readjustment to changed conditions is made more difficult.<sup>1</sup> The Trade Unions' case is that wage-rates need not be reduced if changed conditions are met by improved organization in the industries concerned. The position on both sides is fairly put by a writer previously quoted: 'The lack of mobility and adaptability is not a characteristic of wages and labour alone. The height of wages is not absolute but relative to the productivity of labour, and the productivity of labour depends not on labour only, but on the whole organization of production.'<sup>2</sup>

Whatever be the reasons which brought it about, the outstanding fact was that Britain was suffering from a depression in various industries 'accompanied by a more or less steady figure of 1,000,000 unemployed, at a time when other countries were enjoying a considerable degree of prosperity'.<sup>3</sup>

With the world depression the position became still more serious. Exports declined, and the non-exporting industries suffered the inevitable reactions from further depression in the staple trades. The development of economic nationalism, manifested in growing tariffs, import quotas, monetary control, and other forms of restriction, in all parts of the world, accentuated the decline in exports. The crisis in the various agricultural countries had its effects on Britain in the reduction of the 'invisible' items in the Balance of Payments, while financial crises in Europe also had their reactions on Britain, and the financial crisis of 1931 marked a decline into intense depression. During this year unemployment rose to over

<sup>1</sup> There are other elements in trade-union policy which make for rigidity; e.g. 'demarcation' was, until recently, of some importance in certain trades.

<sup>2</sup> Loveday, *Britain and World Trade*, p. 177.

<sup>3</sup> *Report of the Committee on Finance and Industry*, 1931, p. 47.



2.8 million workers, or over one-fifth of those insured against unemployment, and remained near that level all through 1932 and the early part of 1933. There was, in fact, no substantial fall in the numbers of unemployed until 1935, the figure remaining over 2 millions until then. Almost all industries were affected; a declining demand meant decreases in production, falling prices, and intense competition for the available markets, the whole resulting in a 'spiral of depression'.

In these circumstances it was to be expected that there would be attempts to formulate schemes of control in the various industries. Such attempts were by no means new; in many quarters 'rationalization' had been regarded as a solution of Britain's industrial problems. Thus the Balfour Committee had regarded it as 'abundantly clear that the first step towards putting British industries in a position to compete successfully in overseas markets is to subject their organization and equipment to a thorough process of reconditioning'.<sup>1</sup> Rationalization meant not only the improvement of technique by re-equipment, but also the control of the relations between firms so as to secure the co-ordinated working of the whole industry. Thus it implied the need for some form of amalgamation or co-operation under a degree of central control. Thus the Coal Mines Re-organization Commission (though this belongs to a somewhat later period) referred to the need for 'planned co-ordination in all its phases—development, production, marketing, and research', and decided that 'this can only be achieved by "amalgamation" in some form'. Examining the conditions of individualism in the mining industry, the Commission decided that

'it is inconceivable that no room would be found for lowering the costs of production by getting rid of the waste due to duplication and misplaced effort that are the inevitable consequences of the outlook of each being bounded by the horizon of his own concern.'<sup>2</sup>

<sup>1</sup> *Committee on Industry and Trade, Final Report*, 1929, Cmd. 3282, p. 297.

<sup>2</sup> *Report of the Coal Mines Reorganization Commission*, Dec. 1933, Cmd. 4468, p. 10.

Although the period before the depression saw some amalgamations, which could be termed 'complete' rationalization, these were not a general feature, the chief efforts of producers being directed towards *ad hoc* schemes of price or output control, of elimination of surplus capacity, or other forms of limitation of competition. The depression gave a stimulus towards the development of more comprehensive schemes, which gained strength as competition became more intense. There was also a new factor in the form of intervention by the State. An important step in this direction was the abandonment of free trade in 1931, and the development of a protectionist policy. This provided an environment in which the State could impose some measures of control, and also, in some cases, a weapon which could be used to coerce the recalcitrant producers in any industry. Either at the request of the producers, or on its own initiative, the State has, during the last few years, assisted in the drafting and the operation of control schemes in various industries, some of which will be noted later. In the meantime we may usefully consider in more detail the special problems of the cotton industry.

The industry showed a condition of chronic depression throughout the post-war period. An export trade is essential for its prosperity (about three-quarters of its output was usually exported in pre-war years), and as the cotton industry was the industry most severely hit by competition in foreign markets its position was correspondingly serious. The conditions of the industry in the years 1923 to 1929 appeared to be relatively stable, though at a level, of course, below that of pre-war times; 'if, in those seven years, there were no indications that Lancashire was gaining ground, there was also no sign that she was slipping back'.<sup>1</sup> With the depression, however, the export markets were seriously affected, and the result was seen in an increase in unemployment in Lancashire greater than in the rest of the country. The acute depression

<sup>1</sup> *Readjustment in Lancashire*, Economics Research Section, University of Manchester, 1936, p. 3.

passed, and the abandonment of the gold standard was followed by a minor boom, unemployment in the industry falling by nearly 90,000 in three months. The improvement soon ended. Japan abandoned the gold standard, and Lancashire lost the temporary advantage she had obtained at the end of 1931. Thereafter a slow process of recovery culminated in the recent minor boom (at the end of 1937), stimulated by the British rearmament programme and the regaining of some markets previously lost. This recovery did not involve a return even to the level of 1929, however, the industry remaining in a far from satisfactory position, with exports of less than one-third of the pre-war level and the ever present need to meet foreign competition.

In such conditions there have been numerous critics of the organization of the industry, and the need for rationalization has frequently been urged. Thus, for example, the Chairman of the Calico Printers' Association,<sup>1</sup> having discussed the extreme individualism displayed by the various parts of the industry—where 'separate sections remain as sharply defined as ever, each putting its own interests first', manufacturing and trading being carried on in watertight compartments and the organization limited to 'horizontal' lines—urged the necessity of 'combinations on vertical lines of a series of units including spinning, weaving, finishing, and distribution directed to the reorganization of the industry' so as to make possible 'the elimination of surplus productive plant, reduction of manufacturing costs to the lowest possible point, and the securing of a closer and more intimate touch with our markets'. This, supplemented by an increased productive capacity of the workers (rather than by reduced wages), by better training and organization, by superior machinery, mass-production methods, and co-ordinated research, represented, in his opinion, the essentials of rationalization in the British textile industry.

• Certainly the industry has always presented a picture of extreme individualism. The lack of co-operation is

<sup>1</sup> See Chairman's speech at the Ordinary General Meeting of the Calico Printers' Association, as reported in *The Times*, Sept. 20th, 1934.

visible not only between sections of the industry, but also between the firms composing the various sections. The number of these is almost certainly excessive, since efficient production requires concentration of production in the most efficient plants, so as to secure the economies of increased specialization. At present there are about 700 spinning and 1,100 weaving concerns, as well as about 200 which combine spinning and weaving, all competing for a declining demand. In times of depression not only does every concern compete more severely in the markets for its own products, but it also attempts to gain a foothold in the more prosperous lines, which thus tend to follow one another into the pit of depression.

In contrast to the state of free competition within other sections of the industry, the 'finishing' trade has in the past offered an example of co-operation by amalgamations and price-fixing arrangements between the constituent firms, but the stress of competition during the slump severely tried these attempts at 'team-work' and proved that often the small independent firm can show greater efficiency of organization than the larger amalgamations which require men in control with unusual gifts for large-scale management. Marketing again is divorced from production; this not only involves a burden in the form of costs, but also difficulties in the way of producing the types of goods which are wanted in the various markets. This partly explains the statement that 'Lancashire has lost touch with the consumer'. In short, within each section of the industry—spinning, weaving, and merchanting—there exists a multiplicity of units, highly individualistic in outlook, and unable to co-operate for long in any policy likely to improve the economic position of the industry as a whole.<sup>1</sup>

It should not, however, be too readily assumed that the 'vertical' amalgamation<sup>2</sup> within the industry would be the

<sup>1</sup> *Report on the British Cotton Industry*, 1935, issued by Political and Economic Planning, p. 28.

<sup>2</sup> i.e. combination between concerns carrying on different processes of production.

best means of solving its problems. There may be serious disadvantages in a too closely integrated organization, and it is possible that the essential advantages might be attained by a more efficient system of marketing and by increased co-operation between marketing and the various stages of production. Many regard the highly specialized forms of organization which Lancashire has developed as being more efficient than any integrated organization could be. What is incontrovertible is that the position of the Lancashire industry calls for some measures of readjustment to changed conditions.

This need for readjustment comes principally from the industry's dependence upon its export trade. The home market has been expanding, and in this field there is little to fear from foreign competition.<sup>1</sup> The present trials of the industry arise entirely from the loss of foreign customers to new competitors, either in 'neutral' markets or in the producing countries themselves, the expansion in the home market being but a small item compared with the loss of foreign trade.

The retrocession of the British cotton industry in relation to the position throughout the world as a whole is illustrated by the fact that, while world consumption of raw cotton is now somewhat above the 1913 level, in Britain it is nearly 40 per cent. less than in 1913.<sup>2</sup> The extent of displacement of British cotton goods in world markets has already been dealt with in Part I and referred to in subsequent sections. In reverting to the subject we shall here be mainly concerned to show the relative position in different parts of the world and the causes which operate in each, observing, in passing, that the sufferers in all cases have been principally those manufacturing groups which produce the coarser qualities of

<sup>1</sup> In 1930 the industry had 92.1 per cent. of the home market in piece-goods; in 1934 it had 98.7 per cent.

<sup>2</sup> It should be noted that raw-cotton consumption is an imperfect index of activity, as the relation between weight and yardage varies greatly according to the grade and nature of the finished goods. The figure given, therefore, serves merely as an indication that the British industry has lost ground as compared with the world production of cotton goods.

piece-goods—in other words the ‘American’ section of the trade as contrasted with the ‘Egyptian’.

The following table shows, in more comprehensive detail than has been given already, the decline in piece-goods exports to a number of different markets:

EXPORTS OF COTTON PIECE-GOODS FROM THE UNITED  
KINGDOM, 1913–36

(In million linear yards)

	1913	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Total . . .	7,075.3	4,189.1	3,968.2	3,764.8	2,490.5	1,791.2	2,302.7	2,116.7	2,059.8	2,013.4	1,993.7
British India .	3,057.3	1,550.7	1,452.6	1,268.3	728.4	355.6	555.4	440.4	542.7	497.8	375.5
China and Hong Kong	716.5	116.9	205.1	209.9	69.9	95.4	143.5	60.9	23.0	16.4	8.8
Java . . .	253.3	130.6	133.9	106.9	68.0	37.6	39.9	16.0	11.3	8.2	22.4
British Malaya	131.3	80.1	64.3	87.5	29.4	19.7	38.4	25.2	27.6	28.1	32.9
Egypt . . .	266.6	178.9	143.1	169.6	130.4	78.2	90.2	70.0	45.9	39.2	68.9

(Index, 1913 = 100)

	1913	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Total . . .	..	59.0	56.1	53.1	35.2	25.3	32.5	29.9	29.1	28.5	28.2
British India .	..	50.6	47.3	41.5	23.8	11.6	18.1	14.4	17.8	16.3	12.3
China and Hong Kong	..	16.3	28.6	29.2	9.7	13.3	20.0	8.5	3.2	2.3	1.2
Java . . .	..	51.8	53.0	42.3	26.9	14.9	15.8	6.3	4.5	3.2	8.8
British Malaya	..	61.2	49.1	67.0	22.4	15.0	29.3	19.5	21.0	21.4	25.0
Egypt . . .	..	67.0	53.5	63.5	48.6	29.3	33.7	26.2	17.2	14.7	25.8

Another table may be given to show changes in the percentage distribution of exports of piece-goods among the different markets:<sup>1</sup>

	1924	1930	1933	1936
Europe . . . . .	16.2	15.7	18.2	14.1
Near East . . . . .	8.8	9.4	6.8	6.8
India and Ceylon . . . . .	37.8	34.2	24.6	24.2
Far East . . . . .	12.0	7.8	5.7	4.0
North America . . . . .	5.8	3.4	4.5	5.4
Central and South America . . . . .	9.1	11.6	15.4	15.1
Africa . . . . .	5.9	11.6	15.3	21.8
Australasia . . . . .	4.4	6.3	9.5	8.6
	100.0	100.0	100.0	100.0

<sup>1</sup> This table does not cover *all* exports, but excludes about 3.5 per cent. of the total, the markets for which are given in the Trade Returns as ‘Other British Countries’ and ‘Other Foreign Countries’.

It will be seen that the largest markets are becoming less important in the total trade, the smaller ones showing an increase in importance. Generally speaking, it is in the larger markets that competition has been most severe.

Different factors are at work to account for the loss in particular markets. In some, such as the Argentine and Europe, the British loss may be due to a declining consumption of cotton goods generally. There are regions which have increased their consumption of British cotton goods, e.g. Australasia and Africa, but these have not nearly compensated for Great Britain's loss elsewhere, especially in the East. The decline of exports to India alone accounted for more than half the total decline over the period considered. In India, as in China, the loss was due both to the development of home production and to increased Japanese competition, as the relevant parts of the present book have shown, though in India's case tariff restrictions on Japanese imports tended to change the situation in Great Britain's favour during 1933.

Japanese competition has been a dominant factor in Africa also, where home production is nil. In some markets, e.g. South Africa and Egypt, the consumption of British goods has declined; in other cases, where there has been an actual increase, the gain has been small in comparison with the increase of Japanese imports. Even in an Empire market such as British East Africa, Japan's contribution, which was 24 per cent. of the total imports in 1925, rose in 1933 to 75 per cent., a striking example of Great Britain's inability, before the introduction of special protective legislature, to hold her own in regard to the cotton trade in regions where she possesses the many indirect advantages of political affiliation.

Recently there has been some slackening in these declining trends. Japanese competition has become less intense, and Great Britain has regained some part of the markets she had previously lost (e.g. in the Dutch East Indies, where Japanese imports have fallen considerably). But this movement has been slight up to the present, and in so far as it is attributable rather to changes in Japan than



to improved organization in the British industry it can hardly be looked on as the start of a steady up-trend towards more prosperous conditions for Lancashire. The dominant fact is that exports are still less than one-third of the pre-war level.

Having established the connexion between the internal organization of the industry and its success in the export trade, let us see what has been accomplished in the way of reorganization. The pressure of circumstances led to numerous attempts at this during the post-war period. Few of these had enduring results, however, and none aimed at comprehensive reforms. In 1926, for instance, the Cotton Yarn Association was formed to attempt to organize a general short-time scheme, and to fix minimum prices, but, although it exercised a certain degree of control over its own members, it covered only part of the spinning section, and came to an end in 1929. In the finishing sections there were various price agreements, but few survived the depression of 1930-2. There were two more ambitious schemes in 1929, when the Lancashire Cotton Corporation and the Combined Egyptian Mills were formed. The former had some measure of assistance from the Bankers' Industrial Development Company, and aimed at reorganizing a considerable part of the industry. It was to acquire a large proportion of the spindles in the American section, to eliminate those which were redundant, and consolidate production in a smaller number of mills, each specializing in a few products. By means of increasing the scale of operations, it was expected that considerable economies would be achieved. The results, however, have not fulfilled expectations. The Corporation has eliminated some of the surplus capacity by scrapping spindles (about one-third of all those which it acquired), but the carrying out of its policy has been made difficult by the fact that it has had to shoulder the burden without assistance from the rest of the industry, a task which it could not be expected to continue to do indefinitely. Nor were the expected economies achieved. Greater success has attended the efforts at com-



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bination in the 'fine' section, where the difficulties were less acute.

This line of reorganization having failed to yield the necessary results, it was obvious that the elimination of surplus capacity must be the concern of the whole of each section of the industry. Thus, after long discussion and negotiation, the Cotton Spinning Industry Act of 1936 introduced a scheme for the reduction of surplus capacity in the whole of the spinning section. The main provision of this measure is the establishment of a Board (the 'Spindles Board') with powers to buy up any mills which are offered to it, and to scrap the spindles. The finance is provided by a loan, the charges of which are met by a levy on all spindles running in the industry. Although the scheme was subject to some criticism, and although there were some practical difficulties involved in its operation, the Board has been able to eliminate some of the surplus capacity in this section. In its report of October 1937 the Board showed that in the first year of operations it had bought almost 3·3 million spindles, at an average loss of 2s. 7d. per spindle. It stated that there was still room for further purchase. At that date it estimated that there were 700,000 spindles in mills which had been closed, while surplus capacity in mills which were running (calculated by subtracting the spindles needed to produce the output of yarn, if working full time, from the number in existence) amounted to 3·2 million spindles. On the basis of present output, then, there are almost 4 million surplus spindles. Obviously the reduction of this surplus should have an effect in reducing internal competition and so in hardening prices.

The other sections of the industry have not, however, introduced any similar working arrangements. Numerous attempts to formulate measures for the weaving section in particular have failed, largely because of the difficulty of obtaining the necessary measure of agreement among the large number of firms concerned. In 1936 the printers and dyers put forward separate schemes, involving the elimination of surplus capacity by purchases effected by

means of levies, and proposing pool and quota agreements. The Government regarded the schemes as unsatisfactory, and refused to incorporate them in legislation. Following upon a statement by the President of the Board of Trade in October 1937, the Joint Committee of the Cotton Trade Organizations put forward, however, a comprehensive scheme for the reorganization of the industry. This is not a detailed plan of reorganization; it is rather the drafting of a 'constitution' for the industry. The Joint Committee suggests the passing of an Enabling Act, which will allow approved schemes to become legally binding on all producers without special legislation. The work of initiating schemes would, of course, accrue to the industry itself. To this end it is suggested that there should be established a Cotton Industry Board, representing all sections of producers, and including also representatives of the operatives. This would be the body for initiating schemes or for considering those put forward by the different sections. Further there is proposed an Advisory Committee of three independent persons, charged with considering, from a national viewpoint, schemes proposed by the Board, and with reporting to the President of the Board of Trade, who if he finally approved a scheme would make an order accordingly. Schemes would have to have the approval of a substantial majority of the section concerned before being accepted by the Board. Some of the objects of the schemes to be initiated are suggested by the Committee, and these include the reduction of surplus capacity, the regulation of production, supply, and sales, the establishment of minimum prices or margins, the institution of pools and quotas, and so on. Certain 'safeguards' are suggested, for instance that new entrants should not be excluded, that the scheme should not be detrimental to those employed in the industry, and that the export trade should be benefited.

The passage of such an Act and the institutions of schemes might help the work of reorganization, though it is difficult to forecast whether this will be in a degree, or

of a type, adequate to stimulate the export trade, for which purpose it would be necessary that the schemes should go farther than those which have been adopted for the control of other industries<sup>1</sup> and which have generally been limited to the fixing of minimum prices and the imposition of quotas. The position at present is that the proposed Act would create the machinery for reorganization; but how this machinery will be used must depend upon future conditions.

The improvement of technique which might well be one form which readjustment might take is rendered more difficult by several factors of the present situation. One of these is financial. Keen competition and low profits make it hard to find the means for effecting technical changes. The companies' uncalled reserves of capital have for the most part been exhausted, and in the case of many firms a serious handicap to efforts at reorganization lies in the fact that they find themselves tied financially to banks which, in the interests of their own shareholders, are indisposed to cut losses by wiping off commitments while they hesitate to lend fresh money to an industry faced with so many uncertainties. Another deterrent has been the lack of agreement between workers and employers, labour disputes having become specially serious after 1929. The 'more looms' dispute is an outstanding example. A slowing down of looms, with an increase in the number of looms worked by each operative, which has been urged as an essential policy, would reduce costs but it would also involve displacement of labour to the estimated extent of about 30 per cent., and for this reason it has been opposed by the trade unions. It was only in July 1935 that the adoption of a new 'wages list' provided a comprehensive solution to this particular problem.

The slow introduction of the automatic loom<sup>2</sup> is another case in point, since its use involves both an in-

<sup>1</sup> See below, pp. 347 et seq.

<sup>2</sup> Many producers are still not convinced of the value of the automatic loom.

crease of capital and the reorganization of labour. There has been some increase in the use of the automatic loom recently which may be due mainly to the difficulty of obtaining sufficient numbers of weavers, for, although there is still a considerable amount of unemployment in the cotton industry, there is a shortage of labour in both the spinning and weaving sections. The explanation of this is that the unemployed are largely older workers who have been out of work for a long period and have lost their skill, while the employers' demand is for younger workers, and in some cases for special classes of workers (e.g. little piecers).

That the cotton industry finds difficulty in attracting new recruits is partly due to the fact that the level of wages is, in spite of recent advances, low as compared with more prosperous trades.<sup>1</sup> To quote Professor Jewkes,<sup>2</sup>

'In the face of world competition it is hardly open to doubt that the only way by which a satisfactory level of earnings for individual workers can be guaranteed in the cotton industry is to equip each operative with as large an amount as possible of the most efficient technical equipment, so that each worker is *worth* a high wage. The sombre alternative is to attempt to meet world competition by cutting wages, or by still further cramping world trade through the use of tariffs and quotas, and seeking to retain our privileged position in the world market by forcing down, universally, the standard of living.'

This statement can be regarded as covering the whole industry. It is, of course, true that the British industry still retains an advantage in the production of the finer grades of material, where the unique industrial skill and technical knowledge possessed by the British industrialists count in the highest degree (though it is a significant fact that between 1930 and 1933 there was a movement from higher to lower counts). To make full use of these assets requires a ready adaptation of the structure of the industry

<sup>1</sup> See Jewkes and Gray, *Wages and Labour in Cotton Spinning*, 1935, and Gray, *The Weaver's Wage*, 1937. Wages for women in weaving and for many juveniles are, on the other hand, higher than in many other trades.

<sup>2</sup> Introduction to Gray, *op. cit.*, p. viii.

to the conditions of the moment. By doing this the producers of finer grades should be able to meet competition by 'keeping the novelty and quality above that of the Japanese'—to quote again from the report of Political and Economic Planning<sup>1</sup>—'while at the same time reducing the cost so that the consumer is encouraged to pay a little more instead of being forced to pay a lot more if he wants Lancashire goods'. For this, however, it is necessary to maintain industrial skill, and it is precisely this which is difficult so long as the wages are lower than those in other occupations. There is also the probability that the industry in the East will eventually enter those fields which are still regarded as Britain's special preserve, while it is important to remember that Lancashire must depend on the bulk production of cheaper goods in order to be able to develop the finer grades, and that, as things are at present, the section of the industry engaged in the production of coarser cottons which enter into competition with foreign goods comprises some two-thirds of the whole industry and is the section in which reorganization is most necessary.

The problem before Lancashire is not only serious but complex, and no single solution is likely to prove adequate. At all points alternatives have to be explored. It is, however, possible to say that there is in all sections of the industry a growing tendency towards unity of policy and action, which has found a definite focus in schemes to eliminate surplus capacity and now appears to be working in favour of the proposals of the Joint Committee. It is in the strengthening of this tendency in fields of positive action that hope lies for the future.

Space will not allow of more than a very cursory examination of the position of other British staple industries affected by Eastern competition. The coal industry owes little, if any, of its present position to this cause, but it is in many respects typical of the depressed export industries and provides a case of the development of control designed to mitigate the effects, and to remove the causes,

<sup>1</sup> *Report on British Cotton Industry*, 1935.

of depression. The industry has had to face what must be regarded as a permanent decline in demand, and the Royal Commission on the industry of 1925, finding conditions which it regarded as 'chaotic', recommended reorganization on the basis of amalgamation into larger units, with improvements at other points, especially in marketing organization. The Coal Mines Act of 1930 created a cartel system for the industry, intended to meet the immediate difficulties, and the result has been rigid control over output and prices, while marketing is now centralized, the individual collieries having been relieved of the process of distribution. The results have been seen in an appreciable rise in prices, with correspondingly improved financial conditions in the industry. The Act also aimed at reorganization of production, and established a Reorganization Commission, with powers to enforce amalgamation. The Commission contemplated that the 'operating units, brought, where necessary, to an optimum size by means of financial mergers, should be associated over wider areas for purposes such as control over development, co-ordinated selling policy, and concentration of production'.<sup>1</sup> Although some amalgamations have occurred since 1930, these cannot be attributed to the efforts of the Commission, which has in fact achieved no direct results. Opposition from the coal-owners to compulsory amalgamation has been strong, while the attempt of the Commission to use coercion was ruled out by the Railway and Canal Commission (which is the legal body which must approve any scheme to be enforced by the Commission). Legislation now before Parliament (November 1937) redefines the Commission's powers and slightly strengthens them at some of the weak points, as well as providing for the State ownership of royalties—a necessary condition for any considerable degree of reorganization.

The iron and steel industry, which, though less dependent on foreign markets and enjoying protection in its

<sup>1</sup> *Report of the Coal Mines Reorganization Commission*, Cmd. 4468, 1933, pp. 11-12.

own, is faced with growing competition from the East in the form of Indian products,<sup>1</sup> has similarly been subject to some degree of reorganization. Although the industry is one in which the movement towards amalgamation and integration has always been strong, surplus capacity after the Great War and the loss of foreign markets involved the need for readjustment. Technical improvements were difficult of achievement owing to the fact that conditions of depression made it almost impossible to embark upon programmes of re-equipment. Although the industry is now much more efficient as regards plant than it was ten years ago, it is doubtful whether, until at least very recently, it has progressed as rapidly as some of its competitors. As the Balfour Committee pointed out, the problem of keeping up to date is 'more difficult in a country where the iron and steel industry had grown to full stature in an earlier generation than in countries which were establishing the industry for the first time on a large scale, since the latter had not to contemplate the demolition of existing plant and naturally built their new plant to the most modern designs'.<sup>2</sup> Re-equipment and development were assisted to some extent by the Bankers' Industrial Development Company, while the recent boom, due partly to 'normal' revival from depression and partly to the rearmament programme, has provided both the stimulus and the means for further development. At present output is well above the pre-war level (although exports are below that level), but the end of the boom will almost inevitably bring about a return to conditions of surplus capacity with the threat of severe depression. The means to meet such conditions, however, are now more developed with the changes which have been made in the structure of the industry. The initiative came largely from the Import Duties Advisory Committee, which pressed for reorganization as a condition of tariff protection. In 1934 the British Iron and Steel Federation was formed (to replace the national trade association dating from

<sup>1</sup> See above, pp. 289-93.

<sup>2</sup> *Committee on Industry and Trade, Final Report*, 1929, p. 185.



1918) as a framework of reorganization. As in the case of the cotton-industry proposals already described, the tendency has been to provide the iron and steel industry with a 'constitution' before embarking on any detailed scheme of reorganization. The Federation was created as a body able to represent the whole industry in international negotiations, and it has powers of regulating imports which are a necessary condition for successful negotiation. Its work up to the present has been mainly in the exercise of these two functions (in other matters it can act only in conjunction with the various sectional associations), though it has undertaken the attempt to regulate price agreements. There will undoubtedly be need for further readjustment in the future, more especially in view of the industry's greater dependence upon the home market.

Ship-building represents a major British industry which has been through a period of the deepest depression and has been gravely affected by foreign competition, arising not least from the shipyards which have sprung up in Japan since the beginning of the Great War. In the war years, 1914-18, the capacity of the British yards increased by about half a million gross tons, while Japan increased her capacity by about the same amount. After 1922, when the war wastage had been made good, the excess capacity of the British yards became apparent, and between the end of that year and 1930 never more than a little over one-half of the available capacity was occupied. After 1930, with the depression in world trade, output fell to almost negligible proportions.

As an attempt to eliminate surplus capacity there was formed the National Shipbuilders' Security Limited, a company owned by the ship-builders, which aims at buying up and dismantling redundant yards and sterilizing the sites for ship-building for a forty-year period. A loan was raised, the costs being paid by a levy of one per cent. on all tonnage built; the Bankers' Industrial Development Company provided some assistance. In the seven years since it was formed, the Company has bought up about 1.25 million gross tons. In the meantime other yards



have gone out of existence, so that, in all, capacity has been reduced by about 40 per cent. While this work progressed, there was some revival in activity,<sup>1</sup> so that certain yards, instead of being dismantled, were kept on a 'care and maintenance' basis.

Now, at the end of 1937, the industry is in a state of great activity, but this is very largely because of the armaments demand, and cannot be regarded as a revival of the normal demand of the pre-war period. Nor has Great Britain's share of the world output of merchant vessels returned to its former level. Although the British yards are still probably among the most efficient in the world, they have lost foreign orders mainly because of the policy of foreign nations which leads to their building their own vessels almost regardless of cost. In spite of a certain slowness in adopting new developments, such as in the construction of motor vessels, Great Britain still has advantages which, in normal competitive conditions, would probably preserve her lead. Yet she is now building but a comparatively small proportion of the world's total. Japan has been growing in importance as a builder of ships, but those which she has built have been almost entirely for her own use and owe their construction largely to the Government's general policy of subsidy and protection. The same is true of other countries, notably Italy. We therefore have here another example of an industry which has revived from depression through an increased home demand, but for which a maintained level of exports seems essential if conditions of a permanent decline, and the painful process of readjustment to such conditions, are to be avoided.

The position of the shipping business is similar to that of the ship-building trade in that Britain has to face subsidized foreign competition. Ocean freight rates have during the last few years fallen to an even greater extent than wholesale price-levels. This can be partly attributed to the excessive growth of tonnage. Since 1929 the de-

<sup>1</sup> This was partly due to Government subsidies to shipowners (under the Act of 1935) for the scrapping of old vessels and the building of new.

cline in world trade has been the principal cause of depression in the shipping business, but in the case of British shipping it has been deepened by the growth of competition. Before the War British owners possessed about 40 per cent. of the total world tonnage of merchant vessels; to-day they own less than 30 per cent. Total tonnage, meanwhile, has increased by over 20 per cent. since 1920. Japan, the United States, France, Greece, Holland, Italy, and Norway have all considerably increased their fleets, whose employment they have encouraged by varying degrees of subsidy. The large proportion of world tonnage laid up during the depression involved serious difficulties analogous to those of redundant plant in manufacturing industries. The situation has since been improved by a partial revival in world trade, a rise in freight rates, and also by a reduction in costs resulting from the improved efficiency of vessels. In 1935 the British Government itself instituted a subsidy for tramp vessels, regulated according to the level of freights. The total sum was not to exceed £2 million a year, and this is to be paid only for so long as freights are below 92 per cent. of the level of 1929; for every point by which the average level of the year exceeds this, the subsidy has to be reduced by £250,000. The Act which established the subsidy provided for a certain degree of reorganization and for the regulation of competition in the freight market; it incorporated also the so-called 'scrap and build' scheme.

While revival in world trade has to some extent improved the position of British shipping, it must be remembered that the latter is dependent not only on the state of world trade, but also to a considerable extent on the position of the British export industries. It is, for instance, possible that the reduction in the export of coal has, because of the unprofitableness of one-way cargoes, had an exceptionally adverse effect on shipping. A revival of British exports is especially needed if British shipping is to be saved from conditions of depression in the future.

Other exporting industries must be dealt with summarily. The woollen industry is one which has been

severely depressed in recent years. Taking a quarterly average of declared values of exports, there has been a decline from £69 million in 1924 to £32 million in 1936, which, low as it is, represents a recovery from a still lower level in the period 1931-3.<sup>1</sup> As has been shown earlier in this book, in the Far East Japan has proved an increasingly successful competitor and has largely displaced the British trade to that part of the world, while China has recently developed a domestic woollen industry.

Heightened competition is to be expected in other industries such as the lighter metal and electrical manufactures, which are already suffering from the loss of former markets. Among the industries which, though at present comparatively prosperous, must be prepared to face growing foreign competition, artificial silk and rubber are examples. These newer industries are indeed better organized to meet the challenge than the other staple industries, but their position cannot be viewed with any degree of equanimity.

A review of the present condition of British industries thus shows that there is still present a grave problem of readjustment to the changed conditions of world trade. The present boom in many parts of the industrial structure has delayed, but not removed, the urgency of that problem, and it is not impossible that its final effect may be to make the problem more acute in the future, for, as has been pointed out already, British industry cannot find salvation in the policy of turning from foreign trade to the home market. The growth of control during the last few years also has certain doubtful implications. Although control may mean more 'rationalized' industries, it may also spell a lower standard of living if it results in the exploitation of the consumer. Nor should it be forgotten that intervention and control impart new elements of rigidity to a structure which already suffers from inability to adapt itself readily to change.

<sup>1</sup> The decline in yardage was not so great as this.

### CHAPTER III

## SOCIAL CONSEQUENCES OF TRADE DEPRESSION: UNEMPLOYMENT AND THE DEPRESSED AREAS

WE have in the foregoing section reviewed the effects on British exporting industries of economic-geographical changes, of a universal decline in the demand for leading British exports, and of the rapidly growing competition from newly industrialized countries, particularly Japan. We have traced the results in the shape of industrial depression and in the creation of a fundamental problem of readjustment. We must now widen our outlook and see how depression in the manufacturing areas most affected by foreign competition reacts on the social structure of the country.

This inquiry, which brings us to the crucial point of our study involving the question of the maintenance of established standards of life, involves an examination of the unemployment problem and the case of the 'depressed areas' with special reference to the cotton-manufacturing districts. As already said, a figure of something over a million is the approximate minimum of unemployment in Britain since the Great War.<sup>1</sup> A great part of this unemployment has been concentrated in the older industries; the newer industries, although contributing their quota in times of depression, have not the same record of persistent unemployment.

The following figures<sup>2</sup> provide a general picture of

<sup>1</sup> This does not mean over a million of *permanently* unemployed men, but represents the number out of work at any given moment.

<sup>2</sup> These figures must be read with certain precautions. They are based on the *insured* population as recorded by the Ministry of Labour, and this is not the same as the *employed* population. All workers above a certain salary limit, workers not within the age limit of 16 to 64 years, and workers in occupations which were not insured (e.g. agriculture, seasonal trades) are excluded; altogether these latter comprise about 30 per cent. of the working population, so that the figures in the table refer to only about 70 per cent. Further, they are, of course, only workers 'wholly unemployed' and 'tempo-

British unemployment and of its distribution among certain industries, divided for this purpose—as in the preceeding chapter—into the groups of ‘declining’ and ‘expanding’:

UNEMPLOYED (INSURED) WORKERS (QUARTERLY AVERAGES EACH YEAR)

Percentages of insured workers

	1927	1929	1930	1931	1932	1933	1934	1935	1936	1937
Great Britain . . .	9.4	10.2	16.7	21.4	21.9	19.3	16.4	15.2	12.8	10.2
<i>Declining Industries:</i>										
Coal-mining . . .	18.2	15.6	24.0	29.8	33.9	32.1	28.1	25.8	22.8	13.1
Iron and steel . . .	18.1	19.5	36.1	47.9	46.9	35.8	24.8	21.3	14.7	9.7
Cotton . . .	8.1	13.0	39.8	37.8	26.8	23.7	22.4	21.0	12.9	10.5
Ship-building . . .	25.1	23.7	35.0	57.5	63.3	60.2	49.6	42.5	29.9	21.1
<i>Expanding Industries:</i>										
Electrical engineering . . .	4.8	4.3	8.4	14.8	16.2	14.6	8.1	6.3	3.9	3.0
Artificial silk . . .	6.4	10.4	28.2	29.9	18.3	15.3	11.4	9.2	9.4	6.5
Motor vehicles . . .	7.0	7.0	13.9	21.2	19.9	14.7	9.5	8.2	5.5	4.6
Distributive trades . . .	5.0	6.0	8.9	11.6	12.0	11.7	10.9	10.8	9.7	8.5
Building . . .	10.2	12.1	16.7	22.4	29.0	23.0	18.0	15.8	13.7	12.2

It is clear how greatly unemployment has been concentrated, broadly speaking, in the older and essentially exporting industries. It is, of course, true that during the last two years unemployment has declined in those which fall into this category; but the levels are still considerably above those for the newer industries, while in the case of cotton the apparent fall in unemployment is partly explained by the removal of part of the labour force from national insurance and hence from registration as ‘unemployed’. In 1929 the unemployment percentage in the four ‘declining’ industries taken as a whole was 16.1, while for the five ‘expanding’ industries it was 7.9. In 1933 these averages had become 32.8 per cent. and 15.1 per cent., and in 1936 they were 20.8 per cent. and 10.3 per cent. respectively.<sup>1</sup> In brief, it may be said that the

rarely stopped’, so that under-employment is not indicated; this is, of course, important in the case of the cotton industry.

<sup>1</sup> For the sake of brevity only a few industries are given above. More comprehensive analysis shows the same features. Thus, for example, for

'post-war problem of unemployment is primarily a problem of the older industries'.<sup>1</sup>

To help in balancing the picture, having considered the incidence of unemployment, we may now look at *employment*. The following are the employment figures for the same industries which have already been tabled.

EMPLOYED (INSURED) WORKERS AGED 16-64  
Quarterly average (in thousands)

	1927	1929	1930	1931	1932	1933	1934	1935	1936	1937	1934 as % of 1923
<i>Declining Industries:</i>											
Coal-mining .	980.2	906.8	812.9	735.1	690.5	694.8	705.0	696.4	691.9	754.9	61.3
Iron and steel	159.3	143.9	115.5	88.2	89.1	105.7	126.3	127.5	144.9	164.3	95.1
Cotton .	524.0	482.4	339.5	342.1	379.0	381.4	361.7	349.6	355.3	365.6	75.9
Ship-building	156.1	156.0	133.1	83.0	66.8	67.4	80.1	90.4	113.5	136.4	83.1
<i>Expanding Industries:</i>											
Electrical engineering .	75.5	80.8	82.3	78.8	78.9	77.4	83.8	87.5	97.7	111.2	190.1
Artificial silk	51.5	66.2	56.1	50.8	57.5	59.0	64.7	70.9	72.6	75.5	213.4
Motor vehicles .	216.6	228.2	212.9	198.0	201.9	223.2	245.7	262.4	296.8	335.3	192.2
Distributive trades .	1,502.1	1,577.8	1,607.1	1,656.8	1,715.8	1,759.5	1,787.1	1,789.8	1,849.8	1,886.3	158.4
Building .	761.8	725.7	693.3	666.2	608.6	680.9	761.1	822.9	880.2	909.0	146.5

The group of industries given in this table may be taken as fairly illustrative of changes which have taken place throughout British industry as a whole. If all industries be taken, it is found, as in the case of the selected group, that the increase in employment in the expanding industries is greater than the decrease in the declining. From the general point of view, however, the increase cancels the decrease only to the extent that individual workers have transferred from one to the other. As pointed out already, accessions to the labour force of the expanding industries come largely through the joining up of new recruits as distinct from the absorption of

38 'expanding' industries the unemployment percentage was 8.1 in 1924 and 8.7 in 1936, while for 12 major 'declining' industries it was 11.7 and 20.1 in these two years respectively.

<sup>1</sup> Clay, *The Post-War Unemployment Problem*, 1929, p. 12.

'transferees', and whatever migration of labour may have occurred from the one set of industries to the other<sup>1</sup> there remains a solid core of unemployment in the older industries consisting of workers who cannot easily be changed over. To indicate the degree of 'permanent' unemployment it may be mentioned that of the total unemployed men in July 1936, over one-quarter (or about 450,000 persons) had remained out of work for over a year, while, especially in the depressed areas, the number of persons who had been totally unemployed for periods as long as five years and over is considerable.

A factor which enhances the gravity of the problem is that the declining industries are highly localized in a few areas of the country, namely, the north-west<sup>2</sup> and Lancashire<sup>3</sup> districts of England, the north-east coast,<sup>4</sup> South Wales,<sup>5</sup> and the south-west of Scotland.<sup>6</sup> In June 1929 these five 'depressed' areas contained 31.3 per cent. of the insured population of Britain, but as much as 47.1 per cent. of the unemployed. In June 1931 the percentages were 30.6 and 45.6 respectively. During the last ten years the level of unemployment in the depressed areas as a whole has been about twice as high as that of the other parts of the country. The degree of depression is, of course, far from uniform throughout, some parts of the depressed areas having a level of unemployment which is not greatly above that of the more prosperous areas, while other regions can be justly described as 'derelict'.

Each area has its own special problems, but they all share the common problem of a 'surplus' of labour. The Industrial Transference Board, which was set up in 1928 to facilitate the movement of workers away from areas of depression (especially coal-mining districts, which were then most severely depressed), accepted this problem of

<sup>1</sup> Migration of labour in the distressed areas is dealt with below, p. 359.

<sup>2</sup> Coal, iron and steel, ship-building.

<sup>3</sup> Cotton, coal, iron and steel.

<sup>4</sup> Coal, iron and steel, ship-building, engineering.

<sup>5</sup> Coal, iron and steel.

<sup>6</sup> Coal, iron and steel, ship-building.



surplus labour as one requiring to be dealt with by the transfer of workers. By surplus is meant, as defined in the Board's report, 'the difference between the present insured personnel of the industry and the number of work-people who can count with reasonable certainty upon obtaining their livelihood from the industry'. The need for scaling down the size of certain industries to meet this state of affairs was recognized. In the coal industry the policy was adopted of limiting recruitment of labour so as to allow the process of wastage to have full effect. The size of the surplus in various industries is such, however, that a very long period is required for spontaneous adjustment of this kind to be adequate. It is impossible to estimate with any degree of accuracy the size of the surplus in view of the large number of factors to be considered, none of which can be measured accurately. The Industrial Surveys of the various depressed areas conducted by the Universities in 1932 estimated the surplus at that time to be about 400,000 workers, or 16 per cent. of the insured population of the areas. Since then some readjustment has occurred, and the surplus in these areas may be estimated in the region of 300,000 workers. Whatever may be the exact size of the surplus, it is clear that, with the continued decline in the staple industries, the depressed areas have a working population materially greater than their labour requirements and, moreover, that they offer a diminishing field of employment.

The situation is further aggravated by the displacement of labour by labour-saving machinery and methods. To show how extensive this process is, examples may be quoted from coal-mining and iron- and steel-producing areas on the north-east coast. In the former the ratio between worker and output was reduced by a potential 25 per cent. in the five years between 1924 and 1929; in the latter an increase of output of half a million tons was effected in 1929 with approximately the same number of workers as in 1924. In ship-building, output per man has increased and there is a prospect of further increases due



to new methods in the future. This is also true of the Lancashire cotton industry, where the adoption of technical changes has been comparatively slight during the last ten years, but considerable changes may be impending as the result of past experiment. High-draft spinning, for instance, has been shown to be capable of reducing the labour element by as much as 20 per cent.;<sup>1</sup> in weaving the adoption of a system of eight looms per worker is reckoned to be capable of saving 30 per cent.<sup>2</sup> in labour for a given output, and the introduction—slow up to the present—of automatic looms would cause a substantial labour reduction. At the same time ‘rationalization’ of the industry in the form of the concentration of production in the most efficient units would eliminate the short time prevailing at present and so tend to swell the numbers of those suffering from total unemployment though without necessarily reducing the aggregate of hours worked. It is clear, therefore, that the social problem of the distressed areas cannot find any immediate solution in the bringing about of an increase of output by means of increased efficiency, although, without an increase of efficiency, conditions threaten to become even worse.

Since the ‘switching’ of labour from the depressed to other more flourishing industries is accepted as being essential for the relief of the distressed areas, it is worth while to examine how this is proceeding. The growth of new industries, a noticeable phenomenon throughout the country as a whole, has, generally speaking, been least pronounced in the depressed areas with their highly specialized industries and types of worker. Lancashire is an exception, owing mainly to the fact that it already possessed a greater diversity of manufactures before the crisis arose. Compared with the other depressed areas Lancashire enjoys indeed a relatively favourable increase of employment among ‘expanding’ industries, its position

<sup>1</sup> *Industrial Survey of Lancashire* (H.M. Stationery Office, 1932), pp. 134 and 145.

<sup>2</sup> *Ibid.*, p. 146. One case quoted shows a reduction of 64 per cent. in labour requirements.

approximating to that of the country as a whole, as the following shows:

EMPLOYMENT IN 57 EXPANDING INDUSTRIES, 1924-34

	<i>Employed persons (in thousands)</i>		<i>Percentage increase</i>	<i>Percentage of total employed in 1934</i>
	<i>1924</i>	<i>1934</i>		
United Kingdom .	5,835	7,557	29.5	69.7
Lancashire area .	507	623	33.4	53.5
Wales . . . .	179	203	13.5	49.5
North-east coast .	211	261	23.9	51.3

From this it can be seen that there has been some re-adjustment. Nevertheless, the expanding industries are a less important element in the industrial structure in Lancashire (and in other depressed areas) than in the country as a whole, and very much less important than in prosperous areas.

Even in Lancashire industrial expansion has not been sufficient to counteract contraction and there are districts dependent mainly on cotton which, until recently at least,<sup>1</sup> had become almost as 'derelict' as the pit villages of Durham and South Wales. The position has been summed up by Mr. E. D. McCallum as follows:<sup>2</sup>

'Expansion has taken place even in the depressed areas in several of the industries which are growing throughout the country, but in none of the depressed areas has the growth of the expanding industries been sufficiently great to absorb both the number of workpeople displaced from the basic industries and the number of new potential recruits to industry from an increase in the population of working ages.'

The depressed areas do not, in fact, offer sufficient local markets for the newer industries, while the general state of depression within the areas creates disadvantages from

<sup>1</sup> Recently there has been some development in the introduction of new industries into the most depressed Lancashire towns.

<sup>2</sup> 'The Problems of the Depressed Areas' (in the *International Labour Review*, vol. xxx, no. 2).

the point of view of business leaders looking for suitable areas for new development.

Meanwhile geographical migration, that is to say the drift of workers to other parts of Great Britain, in spite of its many difficulties, has been on a considerable scale. During the post-war period workers have been moving away from the depressed areas to the new industrial regions of the south and east. The following table<sup>1</sup> shows the extent of this movement over the intercensal period 1921-31:

	<i>Gain (+) or loss (—) by migration (in thousands)</i>	<i>Migration as percentage of the 1921 population of the area concerned</i>
<i>Depressed areas:</i>		
Pembroke, Carmarthen, Glamorgan, and Monmouthshire . . . . .	—242	—12.3 per cent.
Durham and Northumberland . . . . .	—207	— 9.3 „
Cheshire and Lancashire . . . . .	—154	— 2.6 „
<i>Expanding areas:</i>		
South-east of England . . . . .	+615	+ 5.0 „
Greater London alone <sup>a</sup> . . . . .	+210	+ 2.8 „

<sup>a</sup> Included also in 'South-east of England'.

The above figures cover ten years, but the migration movement was mainly concentrated in the second half of the period, i.e. after 1926, when the situation was becoming more clearly realized by the industrial workers of the north, and it was not till 1928 that organized migration was taken in hand.<sup>2</sup> The work of transference was impeded by the depression, which created heavy unemployment in all districts and thus naturally made transference extremely difficult. It has, however, shown revival with the passing of the worst phases of depression, and is now an important part of policy. Between 1931 and 1937 there have been about 190,000 persons transferred from the depressed areas, while over 28,000 families have been

<sup>1</sup> From census of 1931.

<sup>2</sup> The Industrial Transference Scheme was applied to the coal industry in 1928 and extended to the cotton districts in June 1930.

assisted to move. Transference is undertaken by the Ministry of Labour, and is closely allied with its work of placing workers in jobs. In order to be acceptable to employers in other districts, the transferees must inevitably be chosen, for the most, from the younger and most adaptable workers, and not from among the older, or among such as have been unemployed for a long period and lost part of their former skill. It is these latter, however, who chiefly constitute the surplus. It is true that there are Ministry schemes of retraining for new employment, but these again have dealt largely with the younger workers, who would be most likely to be employed in their own areas. Finally, there are the obstacles to movement which come from the workers themselves. These vary from region to region, and, of course, from individual to individual, but generally speaking it can be said that it is chiefly the older workers who are unwilling to be transferred and who thus remain the core of the problem.

The figures previously quoted show that in Lancashire there has been less migration of labour than in other depressed areas. The large proportion of female labour in the industry makes the family income, rather than the earnings of the head of the family, the important consideration from the workers' point of view, and this naturally discourages migration. Further, the prevalence of short time and of under-employment has tended to mask the true position in the labour market.<sup>1</sup> A vivid illustration of the limitations upon transference is seen in the results of an investigation into the transferability of unemployed women in one Lancashire town. Out of a total of 2,500 women, only 380 were single and under 40 years old. These were the only workers who could be regarded *prima facie* as suitable; but further investigation revealed that only four were both suitable for transference without training and were willing to move.<sup>2</sup> This is not an extreme

<sup>1</sup> Cf. *Industrial Survey of Lancashire*, pp. 127-8.

<sup>2</sup> See S. Warrington, 'Unemployment Statistics', *Transactions of the Manchester Statistical Society*, 1936.

case, but is typical of Lancashire towns.<sup>1</sup> Thus, whatever policy of transference be adopted, it seems that a large part of the surplus will remain immobile. The draining off of a large proportion of their younger and most adaptable workers means, furthermore, a lowering of standards of life for those remaining, as the number of dependants (old and young) per employed person increases.

Realization of the difficulties of the depressed areas, and of the impossibility of their achieving spontaneous re-adjustment, resulted, in 1934, in special measures for assistance. The Special Areas Act of 1934 appointed two Commissioners (one for England and Wales and one for Scotland), authorized to spend public funds on schemes for the development of certain depressed areas. These areas were, however, limited, and Lancashire was excluded, the areas being Durham and Tyneside, South Wales, West Cumberland, and South-west Scotland. In spite of frequent attempts to have the areas revised, the Government adhered to the original limitations when the Act was renewed and amended in 1937. The work of the Commissioners has been restricted to some extent by their being precluded from making grants to schemes which could already receive a grant from Government sources or which involved any private profit. At first their activity was largely confined to financing public works of a special type (such as sewerage schemes, or the provision of parks and hospitals) but, in the case of England at least, this was followed by other projects designed to encourage transference and land settlement. Trading estates have been established in the depressed areas and inducements to enterprise provided in the form of partial relief from taxes to industrialists who establish plants in the areas.

<sup>1</sup> Another case can be taken from the north-east coast, where the special features causing immobility in Lancashire are not present. In the north-eastern division of the Ministry of Labour (which covers an area larger than the north-east coast depressed area) in 1931, of 12,000 workers aged 18-45 years who had been unemployed for three months or longer, 55 per cent. were unfit or unwilling for transfer, 33 per cent. were willing but needed training, and only 12 per cent. were both willing and suitable. Conditions are still worse for men over 45 years old.

These measures may be expected to give a stimulus to industrial development in the depressed areas. Their effect, however, will be slow and they are at present confined to a part only of the areas, so they cannot as yet be regarded as a general solution of the unemployment problem in Lancashire, though they may well furnish a guide to more comprehensive action.

In any case it is certain that neither transference of labour nor local industrial development provides a satisfactory solution for the essential problem, which is that of the surplus of older workers, of whom many have remained out of employment over a period of years. Schemes of transfer, as already pointed out, hardly affect this class, being mainly applicable to the younger and more adaptable workers, while the labour required by the revival of industries on the spot tends also to be supplied by younger migrants from other industries. This latter effect can be observed in various Lancashire towns which have started new industries. These have obtained their labour supply from among the best workers, and left the surplus almost untouched. Indeed, it seems that only a policy which deals directly with the individuals who constitute the surplus can have any appreciable effect.

Taking the position as a whole, all the adjustments which have up to the present occurred have been insufficient to balance the demand and supply of labour in the depressed areas, with the consequence that there are still, as stated, some 300,000 persons in these areas who are without hope of permanent employment even in good years, and whose support falls on the rest of the community.

This brings us back once more to the decline of the export trade as an essential part of the British problem of the maintenance of standards of life. What is the prospect for the future? To a large extent the developments described in the foregoing pages may be inevitable. The progress of world economy on the lines of the increasing industrialization of countries which had formerly depended for their manufactured requirements upon a small

group of highly industrialized countries, together with the opening up of new countries previously innocent of modern industrialism, was already implicit in the conditions of nineteenth-century development. The tendency 'is a natural and universal one, inseparable from healthy economic progress'.<sup>1</sup> It was, however, artificially hastened by the Great War, and has again been overstimulated by the political doctrines of self-sufficiency which have pervaded so much of the world during the last decade. Great Britain, handicapped by an economic structure of an exceptionally rigid nature, has now to contend with the new and powerful competition of younger industrial centres developing especially in the East.

In so far as the loss of markets has been intensified by the recent growth of artificial restrictions on world trade, we are dealing with a phenomenon of an alterable nature. It has been shown, however, that the relaxation of trade restrictions could, at the best, be only a partial solution, and we have, moreover, to remember that, since these trade restrictions are themselves in part a result of the change in world economy—and furthermore are designed to encourage the change—they share in its character of permanency and are so much the less likely to disappear from the scene.

To maintain that the British economy has entirely failed to respond to the stimulus of changed conditions is certainly unwarrantable. Simultaneously with the growth of unemployment in the older export industries, there has been an expansion of *aggregate* employment in the country. But this, as has been emphasized, is far from disposing of the social problems arising from 'block' unemployment. The existence of a deadweight of unemployed in the depressed areas is a vital problem in itself, and reveals the inadequacy of any readjustment of labour and capital which does not provide the means of increased exporting power, whether by means of reviving

<sup>1</sup> Committee on Industry and Trade, *Survey of Overseas Markets*, 1929, p. 9.

the old staple industries or of developing new industries manufacturing articles for export.

Before an appreciable revival of older industries can take place, it would seem that they need a large measure of reconditioning and reorganization, which in itself would add for the time being to the problem of surplus labour. Moreover, even when reorganized, they probably could not expect to recover the place in the country's economy which they occupied before foreign competition grew to its present intensity. The growth of new categories of industry supplying goods to meet the changing world demand appears, therefore, to be an essential part of any effective solution.



# VI

## AN ECONOMIST'S COMMENT

*By* PROFESSOR T. E. GREGORY



## AN ECONOMIST'S COMMENT

THE reader of the preceding pages will have surveyed a vast range of facts and have been brought face to face with a whole series of different problems, some peculiar to this area or that, others which are common to all the Eastern countries, and others, again, which primarily affect the relationships between East and West. It is not my object in this concluding section of the volume to traverse facts or problems already dealt with in detail previously; or to attempt to summarize the contents of previous chapters: my aim is rather to comment upon the material so presented from the standpoint of an economist.

It is said, and in some sense rightly said, that the fundamental problem with which this world is confronted when the relationships between East and West are discussed, is the 'industrialization' of the East. But this statement does not in reality take one very far: for the process of Eastern industrialization does not, in and of itself, necessarily raise any problems, except such as inevitably mark the internal strains—moral, economic, and sociological—set up by a revolutionary change in a society which has been relatively static for many generations. In reality the problems of the relationships between East and West, which our preoccupation with our own future inclines us to regard as the most important aspect of the process of Eastern industrialization, are peripheral: peripheral not only in the sense that they are a result of a much wider series of phenomena, but also in the sense that they are not necessarily permanent in character, whereas the phenomena which cause them *are* permanent. The industrialization of the East is and must remain a profoundly important event, even though the problems of the relationship between East and West raised by this industrialization prove capable of solution. Or, to state the whole matter in terms of value, we must not judge the industrial revolution in the East merely in terms of the embarrassments which it may occasion to Western interests and Western

industries. In any case, as will speedily become clear, the influence of Eastern industrialization upon the outside world is very complex: there are elements of immediate advantage, as well as of disadvantage, which have to be taken into account.

In order to make the fundamental point clear, let us begin by recalling the economic history of the West since the opening up of the Americas—a period roughly coincident with the growth of large-scale industry, the extension of the system of division of labour nationally and internationally, and the rise of 'Capitalism' as a social system. The ultimate economic result has been a twofold one: there has been both an enormous growth of population and a considerable rise in the standard of life *per capita*. The relationship between population growth and industrialization has been a complex one: 'with every mouth God sends a pair of hands'; and if the power-loom and the factory provided additional means of employment, it is equally clear that the growing pressure of population was the cause, at least in part, of agricultural improvement and technical advance. At any rate, technical progress and population movement have been sufficiently in equilibrium to permit of a substantial improvement in average well-being in spite of the dissipation of resources through war and not infrequent mal-investment. This being the history of the West, what is the history of the East? In some cases, as in India, growing population—due to Western hygiene and Western methods of government—is forcing on industrialization: in other cases, as in Japan, industrialization—perhaps as a result of conscious imitation—is providing the means of additional employment. Whatever the causal sequence may be, it is clear that we should view the Eastern scene in the light of our own historical experience and recognize that the ultimate condition for a rise in the Eastern standard of life is such a balance between population growth and technical progress as to permit of a surplus which will raise the *per capita* welfare of Eastern populations. The attainment of this surplus is theoretically possible by a drastic decline of

population: given the population situation, it is only possible to solve it by means of industrialization. Nor is there anything of a sinister or pessimistic nature in this conclusion, as such. For a growing population with growing resources represents a growing market: in fact, the East is reproducing the conditions which made for the most rapid economic growth in other parts of the world in a not very remote past.

It is part of the fashionable pessimism of the age to harp upon the disadvantages (after having only a short while ago dilated upon the advantages) of a stationary population. Productive capacity and inventiveness are constantly growing; but where are the consumers who will take off the market the output of the 'mass-production' industries? This fear that there will not be a market—erroneous as it is—is responsible in the West for a growing volume of suggestions by which the 'fatal dilemma' can be overcome: they reduce themselves in the main to various devices for maintaining 'mass purchasing power'. Now, in the East the situation differs in this important respect—there is no lack of a market in the sense that there is an insufficient number of potential consumers; what is lacking is the means to satisfy their requirements given the existing productivity. To raise their standard it is necessary to increase productive equipment—and that is to industrialize.

Important consequences follow from this simple, indeed obvious, statement. First, the process of industrialization involves capital accumulation: the supply of savings can come either from 'forced savings' (i.e. inflation, which has the effect of reducing the standard of life for the time being), from the profits or other income-receipts of the local populations, or from abroad. A complete industrialization of the East would obviously involve enormous sums, only a portion of which can be supplied locally. In any case, the more slowly the supply of capital trickles in, the slower the industrialization process. The conclusion seems obvious that either the process of industrialization will take decades to accomplish, so that the dreaded

complete supersession of the Western industrial system by the Eastern is on this (as well as on other) grounds a chimera, or, if the pace of industrialization is to be accelerated, Western capital must assist. This process of assistance has a twofold effect—a financial and a 'real' one. Financially, in so far as interest must be paid if the money is to be forthcoming, Eastern industrialization must involve a stream of income flowing to the West. Even if the goods representing this interest are competitive with Western goods, the receipt of income involves the possibility of additional expenditure in *some form* by the recipients. The 'real' aspect of the industrialization process is provided by the circumstance that the farther the process goes, the greater the demand for capital goods, both quantitatively and qualitatively. It thus appears erroneous to suppose that the process of industrialization will have no directly favourable repercussions on Western industries, since these are, *ex hypothesi*, in a more advanced state and therefore are indispensable to the less advanced areas.

Secondly, a rising standard of life and growing industrialization involve growing dependence on outside areas for raw materials and foodstuffs not available at all, or so cheaply, in the East. The importance of Japan as a market for certain materials, e.g. wool, has been stressed already in previous chapters in this book and the point need not be laboured here. But again it follows that a growth of the consuming power in the East, conditioned by industrialization, is by no means inimical to the welfare of certain portions of the Western world.

Thirdly, a growth in the aggregate consumption of a given area—such as that now under consideration—implies an addition to the existing volume of consumption; even the industrialization of the East does not necessarily involve any fall in the aggregate exports, even of competitive goods, to that area. There is no upper limit to the increase in *per capita* consumption, and even if there were, it has certainly not yet been attained and is not likely to be for many decades to come. There is not the slightest incompatibility, in *principle*, between the indus-

trialization of the East and an increase in aggregate exports to the East, not merely in aggregate exports of capital goods and raw materials, but of aggregate exports of finished (and in certain cases of competitive) goods. Given an expanding volume of production, a rising standard of life, the existence of local differences of costs and productive possibilities, then not only is international trade possible, but it is capable of indefinite expansion. It is no mere coincidence that the greatest growth of international trade generally took place in the nineteenth century, when population and production were also expanding fast. Moreover, this growth of international trade took place, not only between 'complementary' areas, but also (and markedly) between areas all of which were industrializing themselves, and which were capable of, and actually in, competition with one another.

What has so far been said is not a complete picture of the situation: it is intended solely to point the important truth that an expansion of production over a large part of the world, accompanied by expanding population and a rising standard of life, is not fundamentally inconsistent with the continued well-being of the rest of the world, or, indeed, with a growth of that well-being. But it does not in the least follow from this that such a development may not be permanently inimical to particular functions of the non-Eastern world, or that this development may not involve grave problems of inter-adjustment which, until they have taken place, may prove to be inimical to large portions of the non-Eastern world. These propositions may both be true but their truth does not invalidate the general conclusions set out above.

I do not think that it will be seriously maintained by any one that it is possible to stop the industrialization of the East, even if it were desirable on balance to do so, or that it is really a long-run evil to permit the extension of the technical apparatus which alone—given the fact of population pressure—is capable of raising the standard of life in the East. All the difficulties which arise therefrom—and they must be frankly faced—should be judged

in the light of this fundamental truth. Enough has already been said to show that even in the short run not *all* the repercussions are unfavourable, but it now remains to deal with the less favourable aspects of the situation.

'Foreign competition' can take three main forms: intrusion of the home market, replacement of export goods from one country by export goods from another, and finally extrusion from a particular market of goods domestically produced for that market. If the forms of competition vary, the cause of intensified competition is always the offer of the same or a competing article at a more attractive price—though the price may be more 'attractive' not because local selling costs are necessarily lower, but because tariffs and other impediments to free movement raise the cost of the extruded article to the consumer. From the standpoint of the less successful competitor, extrusion from a given market involves the discovery of alternative markets, the lowering of costs so as to win the market back, the discovery of alternative products to which capital and labour, no longer able to compete in the old directions, can be diverted, or, finally, the unemployment of the capital and labour involved; and it is clear that this last alternative is generally the first, and *may* be the final result of intensified competition. The lower costs which cause this displacement are not to be thought of as measured simply in terms of a low standard of life; the problem is much more complex. It is costs per unit of output that matter, and low unit costs may be the result of exceptionally low wages accompanied by a less than proportionately low standard of efficiency. But low unit costs may equally well be the result of a rising standard of wages, accompanied by efficiency rising more than in proportion. 'Efficiency' is itself a complex idea since the efficiency of labour obviously depends in part—and to a growing extent—upon the equipment with which the labourer works. Moreover, in all cases of competition it is not the *absolute* level of unit costs which matters, but the *relative* level.

It has been necessary to say so much in order to make



it clear that the problem of intensified Eastern competition cannot be summed up by referring simply to the 'starvation wages of the East' and that the impact of intensified Eastern competition varies from case to case, according to the different conditions prevailing in given industries and consumers' markets. There is not, either in the East or in the West, a uniform standard of wages or of efficiency, so that generalizations as to the effect of Eastern competition are extraordinarily difficult, even on this ground alone. What is clear is that, in certain cases at any rate (especially in textiles), unit costs of production are considerably lower in Japan than in certain European countries, and since cotton textiles, in particular, are subject to conditions of greater inelasticity of demand (owing to the competition of rayon) than used to be the case, stagnation and retrocession in the cotton trade are directly connected with increased Japanese competition. But it is wrong to infer from this that what is true of cotton must also be true of all other industries, not only because cost conditions may be very different but also because demand conditions are different. Where an industry is working for an elastic market, the same industry may be expanding in both the East and the West, though it may be turning out different grades or qualities of the article. Moreover, though one industry may find its market eaten into, if that condition is accompanied by markedly lower prices, a margin of purchasing power is left over to be spent on other things, so that some other industry may directly benefit.

It may, however, be argued that the growing industrialization of the East (and particularly Japanese industrialization) will undermine the position of one industry after another—and enough has been said in a previous chapter to show how markedly Japan is progressing in varying directions. Is there not a danger that Western industry may in this way be completely annihilated? Any such idea is chimerical, and it is important that the fallacious nature of the argument should be understood. Firstly, if *all* Eastern industries were uniformly superior in efficiency to

Western industries, all international trade between East and West would come to an end: a conclusion which follows directly from the classical theory of international trade. If, for example, it costs Japan half as much to produce anything and everything at home as it costs to produce anything and everything in the West, it would not pay Japan to buy anything whatever in the West and so it would be impossible, in the long run, for the West to buy anything from Japan. Given the actual facts, however, that the relations *inter se* of the cost of producing different articles in the East and the West are not uniform (whatever the absolute cost-level may be in the areas) then trade becomes possible; and even though in the East the absolute level of costs may be lower than in the West, an exchange of products becomes possible, i.e. the East will continue to import not only those things which she cannot produce at all but also those things at which her advantages in production are least. Lastly, the argument assumes that there is nothing remaining to be produced—so that if the West were to be deprived of the production of the existing range of commodities, there are no alternative articles to manufacture. Historically regarded, however, it is certain that one of the main factors forcing on new industries has been the supersession of older areas of production by newer and more efficient ones.

But it remains a fact that, whilst the fear of universal undercutting is fallacious, the emergence of new and aggressive productive areas forces upon the older areas the heavy burden of change and, from the human point of view, such change may be both difficult and painful. Nobody can look upon the relative decay of the Lancashire cotton trade without a sense of pity and dismay, and it is quite clear that though special factors may be operative in this case to make it untypical, public opinion in most countries is not prepared to allow the process of readjustment to go on without some attempt to influence it by Governmental action, or by co-ordinated action on the part of those directly or indirectly affected. Now the appropriate technique must be affected by one's estimate of what

the fundamentals of the Eastern problem are and by the range of considerations introduced into the weighing of the problem. The preceding chapters have discussed the problem of administrative action in relation to the different areas of the East: here it appears necessary only to stress some general considerations.

Firstly, not only the position of threatened producers but also the attitude of consumers must be taken into account—for consumers may be interested in the development of the East not only as customers but also as suppliers of the raw material which the East will increasingly require as industrial production expands. Secondly, restrictive legislation, whether by prohibition, quota, tariff, or voluntary agreement, is *prima facie* more justifiable where the demand for an article is inelastic than where it is elastic. Thirdly, where restriction or limitation of the importation of Eastern products is considered necessary, agreement among the producers themselves is likely to be both more flexible and less productive of ill will than direct action by Government. Fourthly, a check imposed on competition in one direction may merely mean an intensification of competition in some other direction. But above all, the attitude of Governments and business men would be governed, as already said, by definite views as to the real implications of the process of Eastern industrialization. There is some reason to suppose—as the preceding chapters make clear—that the extent and rapidity of the process are being exaggerated by public opinion in the West, perhaps even in the case of Japan. However that may be, it is not the ultimate point to be borne in mind. Industrialization is the only possible solution for the appalling absolute standards of life in the East: it requires a degree of economic irrationality, of which the present writer is not capable, to regard the process as on balance undesirable. It follows that, difficult as the problems of adjustment may be, they remain subsidiary, not in the sense that solutions are easy to find, but in the sense that they flow from an historical process which cannot be resisted, and which ought not to be resisted.





# TABLES



TABLE I

## JAPANESE EXPORTS OF MANUFACTURED ARTICLES

	1929	1932	1933	1934	1935	1936
(Quantity in millions)						
Artificial-silk tissues (sq. yds.) . . . . .	48.7	241.6	260.0	345.7	424.1	527.5
Knitted goods (dozens) . . . . .	12.3	13.7	16.6	18.0	19.8	20.9
Window glass (sq. ft.) . . . . .	5.8	5.1	13.7	28.3	25.4	25.1
Glass bottles (dozens) . . . . .	15.6	16.5	19.1	20.4	25.3	27.3
Cycle tyres (kin) <sup>a</sup> . . . . .	..	3.7	7.5	9.2	8.1	5.7
Printing paper (kin) . . . . .	86.5	52.5	62.5	58.0	61.9	60.9
Iron, raw and semi-manufactured (kin) . . . . .	64.1	193.0	384.0	584.0	721.0	834.9
Enamelled ware (kin) . . . . .	20.8	16.9	22.9	13.1	14.7	17.6
Nails, screws, &c. (kin) . . . . .	4.7	31.7	40.7	47.9	48.2	56.3
Electrical machinery (kin) . . . . .	4.3	2.4	4.1	5.0	11.8	19.9
Spinning machinery (kin) . . . . .	7.8	10.1	12.4	13.8	16.5	22.2
Clocks . . . . .	0.53	0.42	0.76	1.24	1.32	1.47
Electric lamps (gross) . . . . .	0.7	1.9	1.9	1.6	1.3	2.2
(Value in million yen)						
Pottery and glass . . . . .	..	32.2	51.0	61.3	66.1	68.8
Drugs, chemicals, &c. . . . .	..	29.8	48.2	52.4	61.1	62.2
Foods in tin and bottle . . . . .	..	22.8	47.0	49.2	57.1	71.1
Metal manufactures . . . . .	..	21.1	42.6	59.0	67.8	76.5
Boots and shoes . . . . .	..	20.7	29.6	21.5	23.4	20.3
Vehicles and parts . . . . .	..	11.5	28.3	46.6	54.0	58.8
Toys . . . . .	..	15.1	26.4	30.3	33.9	36.5
Oils, fats, waxes, soap . . . . .	..	19.8	26.3	33.0	63.2	74.8
Machinery . . . . .	..	10.9	25.9	57.8	63.9	82.1
Wood manufactures . . . . .	..	11.3	18.6	23.9	23.2	24.7
Lamps and parts . . . . .	..	12.8	15.9	15.7	16.7	18.6
Dyes and pigments . . . . .	..	6.0	11.7	15.5	20.3	19.3
Clocks and instruments . . . . .	..	4.8	11.7	19.5	22.1	26.1
Jewellery . . . . .	..	5.4	8.4	10.1	11.9	11.9
Plaits . . . . .	..	3.2	7.2	8.1	4.6	5.8

<sup>a</sup> 1 kin = 1.3227 lb.

Source: Japanese Trade Returns.

TABLE II  
DISTRIBUTION OF JAPANESE EXPORTS  
(In million yen)

To	1928	1929	1930	1931	1932	1933	1934	1935	1936	1st 6 months 1937
China Proper .	304.0	281.9	225.3	143.9	129.5	108.3	117.1	148.8	159.7	125.0
Hong Kong .	56.2	61.1	55.6	36.7	18.0	23.4	33.5	49.7	58.4	34.9
Manchuria .	69.1	68.8	35.6	11.9	25.9	82.1	107.1	126.0	150.9	91.8
Kwantung .	110.2	124.5	86.8	65.5	120.6	221.1	295.9	300.3	347.2	179.6
All China .	539.5	532.3	403.2	258.0	294.0	434.9	553.6	624.8	716.2	431.3
Straits Settlements	20.4	27.9	26.9	19.1	25.5	46.1	63.3	48.5	58.8	40.0
Netherlands East Indies .	73.4	87.1	66.0	63.4	100.3	157.5	158.5	143.0	129.5	115.3
British India .	146.0	198.1	129.3	110.4	192.5	205.2	258.0	287.5	272.9	129.5
Philippines .	29.1	30.6	28.4	20.4	22.4	24.1	36.5	48.0	51.8	29.6
Siam .	5.8	10.6	9.5	4.7	8.6	18.1	28.0	40.3	43.0	28.1
All Asia (incl. Asiatic Russia) .	834.9	915.2	704.0	505.0	677.6	930.6	1,160.3	1,307.7	1,375.3	825.4
South Africa .	11.7	13.2	14.2	19.3	16.4	26.7	29.5	32.8	41.5	22.2
East Africa .	6.4	13.1	10.7	10.9	15.8	23.2	37.5	40.2	45.4	23.3
West Africa .	..	..	..	..	..	..	3.1	7.4	10.5	6.7
Egypt .	23.7	31.4	29.0	22.8	41.9	55.6	73.0	53.8	40.9	15.7
All Africa .	..	60.5	57.0	58.8	85.6	137.2	182.4	183.5	197.7	100.1
Latin America .	26.5	29.6	21.1	13.5	18.3	46.6	104.8	109.4	110.0	64.0
U.S.A. .	..	914.1	506.2	425.3	445.1	492.2	413.1	535.4	594.3	336.5
Europe .	..	..	127.9	104.1	127.2	182.0	236.9	259.6	303.4	152.0
Australia .	43.0	44.1	25.5	18.4	36.9	51.4	64.5	74.8	68.8	24.4

Source: *Japan-Manchukuo Yearbook*, 1938.



TABLE III

## EXPORTS OF JAPANESE COTTON PIECE-GOODS

(In million square yards)

	1929	1931	1933	1934	1935	1936
From Japan to—						
British India . . . . .	581	404	452	452	562	489
Netherlands East Indies . . . . .	193	212	423	441	370	352
China . . . . .	531	218	111	59	56	37
Egypt . . . . .	107	104	210	234	164	106
Manchukuo and Kwantung . . . . .	56	58	178	254	229	351
Straits Settlements . . . . .	29	41	96	91	45	48
Siam . . . . .	18	6	40	61	70	73
Exports to all countries . . . . .	1,791	1,414	2,090	2,577	2,725	2,710

Source: Japanese Trade Returns.

EXPORTS OF BRITISH COTTON PIECE-GOODS<sup>1</sup>

(In million square yards)

	1929	1931	1933	1934	1935	1936
From U.K. to—						
British Dominions . . . . .	341	258	377	403	377	393
Europe . . . . .	365	267	319	284	246	261
British India, Ceylon . . . . .	1,406	408	496	595	572	448
Asiatic countries . . . . .	568	245	148	97	86	101
American countries . . . . .	449	220	314	334	301	305
African countries . . . . .	423	245	294	199	288	343
Exports to all countries . . . . .	3,672	1,716	2,031	1,994	1,948	1,917

Source: British Trade Returns.

<sup>1</sup> The figures for 1929 and 1931 are in some cases not exactly comparable with those for later years, owing to changes in the method of classification of the British Trade Returns; but the differences are slight.

TABLE IV

## IMPORTS INTO THE NETHERLANDS EAST INDIES BY COUNTRIES OF ORIGIN

(In million guilders)

	1930	1931	1932	1933	1934	1935	1936	1937 Jan. to Aug.
Japan (including Formosa) . . . . .	100.2	92.6	78.3	98.4	93.0	82.0	75.3	88.7
Kwantung, Korea, and Vladivostock . . . . .	11.6	8.6	4.2	3.5	1.7	0.7	..	..
Netherlands . . . . .	163.3	98.6	58.1	39.3	38.0	36.4	47.1	59.0
Singapore . . . . .	91.2	61.9	46.3	34.4	32.4	29.3	28.4	25.7
Great Britain . . . . .	87.9	43.9	35.5	30.7	23.6	21.8	22.1	24.7
Germany . . . . .	86.0	52.0	28.4	24.2	21.3	22.0	25.6	25.5
U.S.A. . . . .	90.4	51.4	24.6	15.6	17.7	18.9	21.9	30.9
British India . . . . .	63.3	32.0	17.4	11.1	7.9	9.2	8.8	8.6
All other countries . . . . .	136.5	124.2	76.0	60.9	50.6	52.1	53.1	58.0
Total. . . . .	830.4	565.2	368.8	318.1	286.2	272.4	282.3	321.1

Source for the years 1930-5: *Annual Report of the Import and Export of the Netherlands Indies for the years 1930-5*, vol. iii (in Dutch).

Source for the year 1936-7: *Economisch Weekblad v. Ned.-Indië*, vol. vi, no. 43, 1937.

TABLE V

## IMPORTS INTO THE NETHERLANDS EAST INDIES OF COTTON TISSUES BY COUNTRIES OF ORIGIN

(In million guilders)

	1931	1932	1933	1934	1935	1936 <sup>a</sup>
Japan . . . . .	38.5	38.3	47.7	44.6	36.3	31.7
Netherlands . . . . .	23.0	13.6	4.5	6.2	7.2	9.7
United Kingdom . . . . .	10.1	8.5	4.2	2.7	2.0	4.6
Singapore . . . . .	9.6	6.9	4.7	2.8	0.7	0.5
All other countries . . . . .	7.6	5.9	3.1	2.1	1.8	1.9
Total . . . . .	88.8	73.2	64.2	58.4	48.0	48.4

<sup>a</sup> Provisional figures.

TABLE VI

IMPORTS INTO THE NETHERLANDS EAST INDIES OF RAYON  
TISSUES BY COUNTRIES OF ORIGIN

(In million guilders)

	1931	1932	1933	1934	1935	1936
Japan . . .	9.9	8.2	8.3	6.9	5.2	5.2
Singapore . . .	0.9	0.6	0.3	0.2	0.1	..
United Kingdom . . .	0.5	0.4	0.3	0.1	0.1	0.2
Netherlands . . .	0.2	0.2	0.3	0.3	0.2	0.2
All other countries . . .	0.9	0.5	0.4	0.2	0.4	0.3
Total . . .	12.4	9.9	9.6	7.7	6.0	5.9

Source for the years 1931-5: *Annual Report of the Import and Export of the Netherlands Indies for the years 1931-5*, vol. iii.

Source for 1936: provisional figures from the same.

TABLE VII

MISCELLANEOUS IMPORTS INTO THE NETHERLANDS EAST  
INDIES FROM ALL COUNTRIES AND FROM JAPAN<sup>1</sup>

(In thousand guilders)

	1931	1933	1936
Iron manufactures . . .	3,729 (12)	5,182 (34)	6,267 (33)
Clothing . . .	4,641 (42)	5,576 (61)	4,594 (62)
Bicycles and parts . . .	1,029 (29)	2,018 (64)	2,060 (56)
Earthenware . . .	2,200 (66)	2,223 (80)	1,456 (78)
Rubber tyres . . .	1,316 (15)	1,419 (31)	1,216 (53)
Glass . . .	1,464 (37)	1,256 (51)	1,386 (61)
Toys . . .	826 (60)	1,088 (79)	565 (71)
Lamps and parts . . .	560 (28)	519 (44)	315 (28)
Beer and wine . . .	315 (6)	2,684 (38)	253 (7)
Cement . . .	2,484 (89)	1,261 (95)	639 (56)

Source of 1931 and 1933: *Annual Report of the Import and Export of the Netherlands East Indies for the years 1931-1935*, vol. iii (Dutch).

Source for 1936: *Economisch Weekblad v. Ned.-Indië*, vol. vi, no. 20, 1937. Figures for 1936 are provisional.

<sup>1</sup> Figures in brackets show imports from Japan as percentage of all imports.

TABLE VIII

JAPANESE COMPETITION IN BRITISH INDIA, SHOWN BY  
ANALYSIS OF INDIAN IMPORTS

(In million rupees)

	1929-30	1932-3	1934-5	1936-7
Cotton piece-goods				
Grey:				
From Japan . . . . .	89.1	33.0	24.3	24.6
„ United Kingdom . . . . .	117.6	17.6	15.8	9.2
Total . . . . .	209.3	50.7	40.4	33.8
White:				
From Japan . . . . .	3.3	16.3	6.5	7.5
„ United Kingdom . . . . .	120.3	52.7	45.2	34.5
„ Switzerland . . . . .	3.5	2.5	1.7	2.0
Total . . . . .	132.8	73.3	54.7	44.9
Coloured:				
From Japan . . . . .	34.5	29.2	21.2	23.7
„ United Kingdom . . . . .	95.0	48.8	50.5	29.5
„ Italy . . . . .	8.3	1.9	0.6	0.2
„ Switzerland . . . . .	1.0	1.4	1.1	0.9
„ Netherlands . . . . .	7.0	0.8	..	..
Total . . . . .	151.5	83.4	74.3	55.0
Cotton twist and yarn				
From Japan . . . . .	16.4	16.1	11.6	13.7
„ United Kingdom . . . . .	29.6	13.2	10.0	7.9
„ China . . . . .	11.0	8.4	9.2	3.8
Total . . . . .	60.0	37.9	31.0	25.5
Cotton hosiery				
From Japan . . . . .	12.3	6.1	5.4	2.9
„ U.S.A. . . . .	0.4	0.1	0.1	..
„ United Kingdom . . . . .	0.1	0.1	0.1	0.1
Total . . . . .	14.4	6.7	5.8	3.3
Rayon piece-goods				
From Japan . . . . .	14.0	25.2	20.4	26.1
„ Italy . . . . .	5.1	2.2	0.9	0.1
„ United Kingdom . . . . .	4.2	1.7	1.7	0.9
„ Germany . . . . .	1.0	0.8	0.2	0.2
„ Switzerland . . . . .	4.3	0.4	..	..
Total . . . . .	31.5	31.0	23.3	27.6
Silk piece-goods				
From Japan . . . . .	12.6	13.3	10.1	6.2
„ China . . . . .	7.8	4.5	2.1	1.7
Total . . . . .	22.3	18.1	12.5	8.1
Glass and glassware				
From Japan . . . . .	7.4	6.5	6.4	6.2
„ Czechoslovakia . . . . .	7.2	2.3	1.9	2.0
„ Germany . . . . .	3.4	1.8	1.4	1.6
„ Belgium . . . . .	2.4	1.5	1.3	1.3
„ United Kingdom . . . . .	2.2	1.2	1.2	1.0
Total . . . . .	25.2	14.2	13.3	12.8

TABLE VIII (*cont.*)

(In million rupees)

	1929-30	1932-3	1934-5	1936-7
Earthenware and porcelain				
From Japan . . . . .	3.1	3.2	2.6	2.7
„ United Kingdom . . . . .	2.6	1.2	1.4	1.5
Total . . . . .	7.2	4.9	4.4	4.7
Hardware				
From Japan . . . . .	2.6	3.0	3.2	3.4
„ Germany . . . . .	16.5	10.8	9.5	9.4
„ United Kingdom . . . . .	18.0	9.4	9.8	9.9
„ U.S.A. . . . .	5.9	1.7	3.0	2.6
Total . . . . .	50.7	29.9	30.5	28.9
Apparel (including boots and shoes)				
From Japan . . . . .	4.8	5.7	5.5	4.8
„ United Kingdom . . . . .	8.2	3.0	2.6	2.4
„ Germany . . . . .	2.4	1.0	0.6	0.6
„ U.S.A. . . . .	2.6	0.7	0.8	0.6
Total . . . . .	25.9	13.6	11.7	10.1
Bicycles				
From Japan . . . . .	0.6	1.9	1.9	1.6
„ United Kingdom . . . . .	9.7	5.2	7.0	8.4
Total . . . . .	11.9	8.1	9.9	11.2
All imports				
From Japan . . . . .	235.9	205.0	208.0	212.6
„ United Kingdom . . . . .	1,031.0	487.7	537.5	480.9
Total . . . . .	2,408.0	1,325.8	1,322.5	1,252.2

Source: *Review of the Trade of India, 1936-7*, and *Indian Seaborne Trade Accounts*, March 1937 (and earlier years).

TABLE IX  
JAPANESE EXPORTS TO GREAT BRITAIN  
(In million yen)

	1929	1933	1936
Tinned and bottled foods . . . . .	5.5	13.1	32.4
Raw silk . . . . .	4.1	14.7	23.6
Buttons . . . . .	0.8	1.6	2.6
Pottery . . . . .	0.5	1.3	1.3
Wood . . . . .	2.3	3.8	8.3
Lamps . . . . .	0.4	2.9	2.5
Toys . . . . .	1.4	4.1	5.9

Source: Japanese Trade Returns.

TABLE X  
JAPANESE EXPORTS TO AUSTRALIA  
(In million yen)

	1929	1931	1933	1936
Silk tissues . . . . .	26.3	8.7	10.8	4.1
Cotton tissues . . . . .	2.9	2.9	10.0	14.0
Rayon tissues . . . . .	.. <sup>a</sup>	0.6	9.1	18.4
Toys . . . . .	0.5	0.2	1.8	2.1
Glass and glassware . . . . .	0.6	0.1	0.8	1.1
Straw plaits . . . . .	0.1	..	0.3	0.2
Cotton towels . . . . .	0.2	0.2	0.7	0.5
Lamps . . . . .	0.1	0.2	0.6	0.6
Pottery . . . . .	1.2	0.7	2.7	2.3

<sup>a</sup> Not available, rayon included with silk.

Source: Japanese Trade Returns.

TABLE XI

IMPORTS OF BRITISH AND JAPANESE COTTON TEXTILES INTO  
THE BRITISH COLONIAL EMPIRE

	Quantities (million yards)			Index of quantities (1929 = 100)			Distribution (per cent.)		
	Total	U.K.	Japan	Total	U.K.	Japan	U.K.	Japan	Others
<b>East African Markets<sup>1</sup></b>									
1929 . . .	109.4	23.6	32.6	100	100	100	21.6	29.8	48.6
1931 . . .	96.5	13.0	50.5	88	55	155	14.1	52.4	33.5
1933 . . .	104.0	11.7	78.2	90	50	240	11.3	75.2	13.5
1935 . . .	130.0	13.1	110.0	119	56	337	10.1	84.6	5.3
1936 . . .	140.1	10.5	122.4	128	44	375	7.5	87.3	5.2
<b>West African Markets<sup>2</sup></b>									
	a	a	a						
1929 . . .	141.4	124.4	..	100	100	..	88.0	..	22.0
1931 . . .	97.2	86.4	1.0	69	69	100b	88.9	1.3	9.8
1933 . . .	148.1	113.5	15.6	105	91	1,560b	76.6	10.5	12.9
1935 . . .	195.9	159.4	1.5	140	129	150b	81.6	0.8	17.6
1936 . . .	263.4	191.1	2.7	186	154	271b	72.6	1.0	26.4
<b>Ceylon</b>									
1929 . . .	56.9	27.5	8.2	100	100	100	48.4	14.4	37.2
1931 . . .	54.9	16.0	23.7	96	58	289	29.2	43.2	27.6
1933 . . .	60.7	9.6	41.4	107	35	505	15.8	68.2	16.0
1935 . . .	55.6	28.6	6.5	100	104	81	50.1	7.4	42.5
1936 . . .	66.8	31.6	10.3	117	115	126	47.3	15.4	37.3
<b>Malaya</b>									
1929 . . .	166.5	86.0	34.7	100	100	100	51.6	20.8	27.6
1931 . . .	99.9	21.6	49.8	59	25	144	21.8	50.4	27.8
1933 . . .	145.9	25.9	99.5	88	30	287	17.8	68.2	14.0
1935 . . .	103.6	33.6	53.8	63	39	153	32.3	51.9	15.8
1936 . . .	114.4	38.1	53.0	69	44	153	33.2	46.3	20.5
<b>West Indian Markets<sup>3</sup></b>									
1929 . . .	41.1	21.9	..	100	100	..	53.3	..	46.7
1931 . . .	40.9	20.9	0.2	99	96	100b	51.1	0.5	48.4
1933 . . .	43.5	28.0	10.2	106	128	5,100b	64.4	23.5	12.1
1935 . . .	53.3	44.7	0.2	130	204	100b	83.9	0.4	15.7
1936 . . .	47.0	41.3	0.1	114	189	50b	87.9	0.2	21.9

a West African imports in million square yards.

b 1931 = 100.

Source: *Statistical Abstract of the British Empire, 1937.*

<sup>1</sup> Kenya  
Uganda  
Nyasaland  
Somaliland  
Tanganyika  
Zanzibar

<sup>2</sup> Gambia  
Gold Coast  
Nigeria  
Sierra Leone

<sup>3</sup> Barbados  
Jamaica  
Trinidad  
Tobago  
British Guiana

TABLE XII

## TANGANYIKA

*Imports and Average Import Values of Cotton  
Piece-goods*(Quantities in thousand yards; Average Import Values in £ per  
thousand yards)

				1930	1931	1932	1933	1934
Grey:								
Total	QUANTITY	.	.	12,945	13,846	11,032	10,142	11,113
	VALUE	.	.	15.2	12.7	11.1	10.2	
From India	Q	.	.	3,637	3,431	1,673	1,216	847
	V	.	.	16.9	15.0	14.1	13.3	
„ Japan	Q	.	.	8,961	10,084	9,226	8,846	10,136
	V	.	.	14.4	11.9	10.5	9.7	
Bleached:								
Total	Q	.	.	3,076	2,723	3,656	3,039	2,091
	V	.	.	23.1	16.3	10.3	11.7	
From U.K.	Q	.	.	1,236	528	445	418	176
	V	.	.	18.6	14.4	17.8	15.1	
„ India	Q	.	.	177	639	133	150	65
	V	.	.	26.2	9.3	24.1	16.5	
„ Holland	Q	.	.	929	603	322	163	48
	V	.	.	24.9	21.6	21.2	20.8	
„ Japan	Q	.	.	595	1,260	1,684	2,284	1,783
	V	.	.	15.4	12.7	10.7	9.9	
Printed (other than Kangas):								
Total	Q	.	.	1,907	1,444	3,682	3,865	5,019
	V	.	.	25.1	17.9	11.9	11.1	
From U.K.	Q	.	.	374	198	344	62	117
	V	.	.	31.4	26.9	26.6	30.0	
„ Germany	Q	.	.	259	39	16	11	2
	V	.	.	39.1	31.8	25.0	40.6	
„ Holland	Q	.	.	200	91	30	7	1
	V	.	.	33.8	31.2	25.6	21.8	
„ Italy	Q	.	.	148	143	73	21	1.5
	V	.	.	30.4	25.8	25.7	22.6	
„ Japan	Q	.	.	837	946	3,136	3,737	4,699
	V	.	.	14.7	12.2	9.7	10.5	
Printed Kangas:								
Total	Q	.	.	3,515	2,105	2,538	2,376	2,354
	V	.	.	30.1	25.3	22.9	21.4	
From U.K.	Q	.	.	2,359	1,231	1,969	1,735	1,630
	V	.	.	29.4	24.9	22.8	20.9	
„ Holland	Q	.	.	1,124	866	557	607	505
	V	.	.	31.4	25.6	23.1	22.8	
„ Japan	Q	.	.	..	..	..	15	205



TABLE XII (*cont.*)

				1930	1931	1932	1933	1934
Piece-dyed:								
Total	Q	.	.	7,243	7,644	9,625	11,872	11,461
	V	.	.	25.0	18.5	14.0	12.8	
From U.K.	Q	.	.	2,111	1,446	1,701	994	741
	V	.	.	32.4	27.8	23.2	27.7	
„ India	Q	.	.	2,965	3,589	2,152	677	115
	V	.	.	18.3	15.9	15.5	15.1	
„ Germany	Q	.	.	173	98	27	13	6
	V	.	.	34.7	29.8	26.2	27.8	
„ Holland	Q	.	.	1,522	743	223	62	37
	V	.	.	26.5	22.2	21.8	22.3	
„ Italy	Q	.	.	182	190	48	18	6
	V	.	.	36.0	25.1	30.3	37.9	
„ Japan	Q	.	.	253	1,564	5,461	10,101	10,555
	V	.	.	16.2	12.1	10.0	11.1	
Yarn-dyed:								
Total	Q	.	.	4,284	3,188	3,711	4,727	6,576
	V	.	.	23.6	16.7	14.2	12.3	
From U.K.	Q	.	.	383	131	157	89	88
	V	.	.	31.0	25.5	27.0	28.5	
„ India	Q	.	.	802	721	580	528	318
	V	.	.	23.2	20.9	17.7	18.5	
„ Germany	Q	.	.	115	31	48	45	27
	V	.	.	30.0	74.3	27.4	20.4	
„ Holland	Q	.	.	1,447	541	423	368	315
	V	.	.	30.7	25.3	26.4	24.9	
„ Japan	Q	.	.	1,387	1,668	2,378	3,568	5,704
	V	.	.	12.9	10.7	9.1	9.0	

TABLE XIII

## PALESTINE

*Imports and Average Import Values of Cotton Piece-goods*

(Quantities in thousand kilos; Average Import Values in £ per 100 kilos)

					1931	1932	1933
Grey:							
Total					QUANTITY . . .	717.1	799.5
					VALUE . . .	7.6	7.2
From U.K.					Q . . .	12.1	33.4
					V . . .	9.5	12.6
„ Egypt					Q . . .	274.5	16.4
					V . . .	7.5	7.1
„ Japan					Q . . .	424.5	747.8
					V . . .	7.4	7.0
Bleached:							
Total					Q . . .	425.8	497.5
					V . . .	15.6	14.0
From U.K.					Q . . .	249.9	174.7
					V . . .	16.6	18.0
„ Italy					Q . . .	53.1	60.8
					V . . .	14.7	15.0
„ Egypt					Q . . .	26.3	29.4
					V . . .	11.7	9.8
„ Syria					Q . . .	72.6	209.2
					V . . .	10.3	9.6
Printed and dyed:							
Total					Q . . .	1,472.1	1,720.6
					V . . .	17.8	16.4
From U.K.					Q . . .	281.1	280.4
					V . . .	22.4	21.6
„ Belgium					Q . . .	37.4	43.8
					V . . .	18.2	17.6
„ Czechoslovakia					Q . . .	24.4	33.6
					V . . .	33.0	33.4
„ Germany					Q . . .	24.7	37.7
					V . . .	30.3	29.7
„ Italy					Q . . .	344.7	290.5
					V . . .	17.6	18.3
„ Egypt					Q . . .	215.3	69.3
					V . . .	12.8	14.1
„ Japan					Q . . .	324.1	794.4
					V . . .	11.3	11.5
„ Syria					Q . . .	195.7	116.9
					V . . .	21.8	19.9

TABLE XIV

PIECE-GOODS EXPORTS OF COTTON AND RAYON  
FROM JAPAN AND OTHER COUNTRIES

(In thousand quintals)

							1935	1936
Japan								
Cotton .	.	.	.	.	.	.	2,725.1	2,709.9
Rayon .	.	.	.	.	.	.	407.9	507.3
United Kingdom								
Cotton .	.	.	.	.	.	.	1,760.1	1,811.1
Rayon .	.	.	.	.	.	.	14.4	24.0
Mixtures	.	.	.	.	.	.	35.3	40.2
Italy								
Cotton .	.	.	.	.	.	.	234.4	241.3
Rayon .	.	.	.	.	.	.	22.4	11.7
Mixtures	.	.	.	.	.	.	26.0	25.5
France								
Cotton .	.	.	.	.	.	.	346.7	357.2
Rayon .	.	.	.	.	.	.	29.4	36.5
Germany								
Cotton .	.	.	.	.	.	.	95.7	159.6
Rayon .	.	.	.	.	.	.	19.1	26.6
Mixtures	.	.	.	.	.	.	6.2	8.1
Switzerland								
Cotton .	.	.	.	.	.	.	24.7	28.6
Rayon .	.	.	.	.	.	.	2.0	2.2
Mixtures	.	.	.	.	.	.	0.3	0.3
Holland								
Cotton .	.	.	.	.	.	.	103.4	126.6
Rayon .	.	.	.	.	.	.	0.6	1.3
Mixtures	.	.	.	.	.	.	0.5	0.4
Czechoslovakia								
Cotton .	.	.	.	.	.	.	64.5	66.9
Rayon .	.	.	.	.	.	.	5.6	6.7
United States								
Cotton .	.	.	.	.	.	.	185.6	200.5
Rayon .	.	.	.	.	.	.	5.8	11.5
Mixtures	.	.	.	.	.	.	1.5	1.8

Source: Statistics published by the Joint Committee of Cotton Trade Organizations, Manchester.

TABLE XV

## JAPANESE RAYON PIECE-GOODS EXPORTS BY DESTINATION

(In million square yards)

	1931	1932	1933	1934	1935	1936
Total . . .	139.5	247.1	260.1	345.7	424.2	527.5
China, Manchuria, and Kwantung . . .	5.3	1.5	6.9	18.6	28.5	60.5
India and Ceylon . . .	61.4	92.6	62.0	76.3	75.1	92.1
Malaya . . .	7.4	8.5	11.6	10.7	5.5	9.7
Netherlands East Indies . . .	27.4	59.5	60.8	46.7	50.0	51.6
Philippines . . .	8.2	6.7	2.9	6.1	18.7	35.4
Egypt . . .	3.2	19.8	16.2	26.6	20.2	10.9
South Africa . . .	9.5	12.2	9.7	13.8	12.8	14.3
East Africa . . .	2.6	5.1	2.9	3.9	2.5	3.0
Australia . . .	1.3	8.3	21.2	43.0	65.8	58.0
Other countries . . .	13.2	27.5	65.9	100.0	145.1	192.0

Source: Japanese Trade Returns.

TABLE XVI

## JAPANESE EXPORTS TO SOUTH AMERICA

(In thousand yen)

	1931	1934	1936
Cotton tissues . . .	2,249	30,996	29,164
Silk tissues <sup>a</sup> . . .	3,209	2,018	1,447
Rayon tissues <sup>a</sup> . . .	242	3,732	5,179
Pottery <sup>a</sup> . . .	390	1,182	1,056
Buttons <sup>a</sup> . . .	422	672	481
Toys <sup>a</sup> . . .	318	419	763
Machinery and parts <sup>a</sup> . . .	48	150	277
Total, including others . . .	10,225	61,457	68,761

<sup>a</sup> The figures for these commodities do not cover the whole of South America, except for 1931. Those for silk and rayon tissues cover only Argentina and Uruguay; those for pottery, buttons, and toys only Argentina and Brazil; those for machinery and parts only Brazil. In each case much the greater part of the trade is done with the countries included.

Source: Japanese Trade Returns.

# BIBLIOGRAPHY

## GENERAL (FAR EAST)

- GREAT BRITAIN: Department of Overseas Trade: Annual Reports by H.M. Trade Commissioners, Commercial, Diplomatic, and Consular Officers on Commercial and Financial Conditions in China, India, Japan, &c. London: H.M. Stationery Office.
- : Report of the British Economic Mission to the Far East, 1930-1. 1931. London: H.M. Stationery Office. 156 pp. 2s. 6d.
- : Report of the Cotton Mission, 1931. London: H.M. Stationery Office. 96 pp. 1s.
- BAIN (H. F.): Ores and Industry in the Far East. 1933. Enlarged and revised edition. New York: Council on Foreign Relations. Demy 8vo. xvi+288 pp. \$3.
- BARNES (J.), *ed.*: Empire in the East. 1934. New York: Doubleday, Doran. La. 8vo. vii+322 pp. \$3.25.
- FIELD (F. V.), *ed.*: The Economic Handbook of the Pacific Area. 1934. New York: Doubleday, Doran. London: Allen & Unwin. La. demy 8vo. xii+646 pp. Map. 18s.
- HOLLAND (W. L.), *ed.*: Commodity Control in the Pacific Area: a Symposium on Recent Experience. 1935. London: Allen & Unwin. California: Stanford University. Sm. roy. 8vo. 25s.
- INTERNATIONAL LABOUR OFFICE: World Textile Industry: Economic and Social Problems. 1937. Geneva: International Labour Office. 2 vols. La. 8vo. 8s. each.

### Problems of the Pacific:

1927. Proceedings of the Second Conference of the Institute of Pacific Relations. Edited by J. B. Condliffe. 1928. Chicago University Press. Cr. 8vo. ix+630 pp. 8 maps. \$3.
1929. Proceedings of the Third Conference. Edited by J. B. Condliffe. 1930. Chicago University Press. Cr. 8vo. 720 pp. \$5.
1931. Proceedings of the Fourth Conference. Edited by Bruno Lasker. 1932. Chicago University Press. Cr. 8vo. xxi+548 pp. \$5.
1933. Proceedings of the Fifth Conference. Edited by Bruno Lasker and W. L. Holland. 1934. Oxford University Press; Chicago University Press. Cr. 8vo. xiii+528 pp. 21s. \$5.
1936. Proceedings of the Sixth Conference. Edited by W. L. Holland and Kate L. Mitchell. 1937. Oxford University Press. Cr. 8vo. 470 pp. 21s.
- THOMAS (Albert): Report on Labour Conditions in the Far East, submitted to the Governing Body of the International Labour Office. 1929. Geneva: International Labour Office. 20 pp.
- UTLEY (F.): Lancashire and the Far East. 1931. London: Allen & Unwin. 8vo. 395 pp. 16s.

- WINDETT (N.): Australia as Producer and Trader, 1920-32. 1933. London: Oxford University Press. Demy 8vo. xii+320 pp. 15s.  
International Federation of Master Cotton Spinners and Manufacturers Association, Manchester: International Cotton Bulletins (bi-monthly).

## PERIODICALS:

- Japan Weekly Chronicle (Tokyo).  
—— Commercial Supplement (Tokyo).  
Mitsubishi Circular: Mitsubishi Economic Research Bureau (Tokyo).  
The Oriental Economist (Tokyo).

## CHINA

- BAIN (H. F.): Ores and Industry in the Far East. (See above under GENERAL.)  
Bank of China, Shanghai: Research Department: Position of China as a producer of raw material and consumer of manufactured products.  
——: Annual Reports.  
BEALE (Louis): Economic and Commercial Conditions in China (Overseas Trade Department Report), 1935-7. London: H.M. Stationery Office. 8vo. 1s. 3d.  
BUCK (J. L.): Chinese Farm Economy. 1930. Chicago University Press; Cambridge University Press. 8vo. xii+476 pp. 22s. 6d.  
China Year Book. Edited by H. G. Woodhead. London: Simpkin Marshall (annual since 1912).  
Chinese Year Book. Edited by: 1935-6, Kwei Chungsu; 1936-7, Chao-ying Shih and Chi Lsieu Chang. London: Kegan Paul; Probsthain (annual since 1935-6).  
FONG (H. D.): Cotton Industry and Trade in China. 1932. Tientsin: Chihli Press. La. 8vo. 2 vols. 32s. 6d.  
KING (S. T.) and LIEU (D. K.): China's Cotton Industry (*in* Problems of the Pacific, 1929).  
League of Nations: Council Committee on Technical Co-operation between the League of Nations and China: Report of the Technical Agent on his Mission in China from the date of his appointment until April 1st, 1934. (Rajchman Report.) General, 1934. 1. London: Allen & Unwin. 72 pp. 2s. 6d.  
LIEU (D. K.): The Growth and Industrialization of Shanghai. 1936. Shanghai: China Council of the Institute of Pacific Relations. 8vo. ix+466 pp. Chinese \$2.50.  
ORCHARD (J. E.): China as a Source of Iron and Fuel (*in* Japan's Economic Position. See below under JAPAN).  
PEARSE (A. S.): The Cotton Industry of Japan and China. 1929. Manchester: Taylor, Garnett & Evans. 8vo. 254 pp. 21s.  
Problems of the Pacific, 1931, 1933, 1936. (See above under GENERAL.)  
REMER (C. F.): Foreign Investments in China. 1933. New York: Macmillan. 8vo. xxi+708 pp. 25s.

- REMER (C. F.): *Foreign Trade of China*. 1926. Shanghai: The Commercial Press. New York: Stechert. xii+269 pp. 12s.
- SALTER (Sir A.): *China and the Depression; Impressions of a three months' visit*. 1934. China: National Economic Council. La. 8vo. 149 pp.
- TAO (L. K.) and LIN (S. H.): *Industry and Labour in China*. 1931. World Social Economic Congress. 8vo. 64 pp.
- TAWNEY (R. H.): *Land and Labour in China*. 1932. London: Allen & Unwin. 8vo. 207 pp. 7s. 6d.
- VINACKE (H. M.): *Problems of Industrial Development in China*. 1926. Princeton University Press; Oxford University Press. 8vo. ix+209 pp. 9s.
- WITTFOGEL (K. A.): *Wirtschaft und Gesellschaft Chinas*. 1931. Leipzig: Hirschfeld. 8vo. 767 pp. Rm.32.
- Institute of Pacific Relations*: Conference Data Papers.
- DJANG (S. M.): *China as a Producer of Raw Materials and as a Consumer of Manufactured Goods*. 1933. Banff Conference. 44 pp. Mexican \$1.00.
- FONG (H. D.): *Rural Industries in China*. 1933. Banff Conference. 68 pp. Mexican 75c.
- : *Towards Economic Control in China*. 1936. Yosemite Conference. 91 pp. 75c. (Chinese).
- Ho (F. L.): *Rural Economic Reconstruction in China*. 1936. Yosemite Conference. 59 pp. 75c. (Chinese).
- Ho (F. L.) and FONG (H. D.): *The Extent and Effects of Industrialization in China*. 1929. Tientsin: Nankai University. La. 8vo. 34 pp.
- NIEH (C. L.): *China's Industrial Development: its Problems and Prospect*. 1933. Banff Conference. 53 pp. Mexican 75c.
- TAO (L. K.): *The Standard of Living among Chinese Workers*. 1931. Shanghai Conference. 37 pp.

#### PERIODICALS AND JOURNALS:

- Annals of the American Academy of Political and Social Science*, Philadelphia.
- Chinese Economic Bulletin* (Shanghai). Amalgamated in January 1936 with the *Chinese Economic Journal*.
- Chinese Economic Journal* (Shanghai).
- Far Eastern Survey* (New York, American Council of the Institute of Pacific Relations).
- Nankai Social and Economic Quarterly*.
- Oriental Affairs* (Shanghai).

#### JAPAN

- Great Britain: Department of Overseas Trade: *Report on the Cotton Spinning and Weaving Industry in Japan*, by W. B. Cunningham. 1927. London: H.M. Stationery Office. 3s.
- United States: Department of Commerce: *Trends in Japan's Trade*. 1926.

- United States: Tariff Commission: Report of Japanese Cotton Industry and Trade. 1921.
- ALLEN (G. C.): Modern Japan. 1928. London: Allen & Unwin. 226 pp.
- ANDREADES (A.): Les Finances de l'Empire japonais et leur évolution. 1932. Paris: Alcan. Sm. 8vo. 202 pp.
- ASAHI (I.): The Secret of Japan's Trade Expansion. 1934. Tokyo: International Association of Japan. 8vo. 130 pp.
- CROCKER (W. R.): The Japanese Population Problem. 1931. London: Allen & Unwin. 8vo. 240 pp. 10s. 6d.
- Federation of British Industries: Report of Mission to the Far East, Aug.-Nov., 1934. 1s.
- HONJO (E.): The Social and Economic History of Japan. 1935. London: Kegan Paul. Sm. 8vo. 410 pp. 6s. 6d.
- International Labour Office: Industrial Labour in Japan. 1933. Geneva: I.L.O. London: P. S. King. 8vo. xvi+413 pp. 12s. 6d.
- ISHII (R.): Population Pressure and Economic Life in Japan. 1937. London: P. S. King. 8vo. 259 pp. 12s. 6d.
- Japan Year Book. 1937. Tokyo: Foreign Affairs Association of Japan (annual).
- Japan and Manchukuo Year Book. 1938. Tokyo: Japan and Manchukuo Year Book Company (annual).
- MAURETTE (F.): Social Aspects of Industrial Development in Japan. 1934. Geneva: International Labour Office. La. 8vo. 69 pp. 1s. 3d.
- Mitsubishi Economic Research Bureau: Japanese Trade and Industry. 1936. London: Macmillan. 8vo. 663 pp. 21s.
- : Monthly Circulars.
- MOULTON (H. G.): Japan—an Economic and Financial Appraisal. 1931. Washington: Brookings Institution. 8vo. 645 pp. \$4.
- NASU (S.): Land Utilization in Japan. 1934. Chicago University Press. 328 pp. \$4.
- ORCHARD (J. E.): Japan's Economic Position. 1930. New York: McGraw-Hill. 8vo. 504 pp. 25s.
- PEARSE (A. S.): The Cotton Industry in Japan and China. (See above under CHINA.)
- PENROSE (E. F.): Population Theories and Their Application: with special reference to Japan. 1934. California: Stanford University Press. 8vo. xiv+347 pp. \$3.50.
- Political and Economic Planning (P.E.P.): Report on the British Cotton Industry. 1933. London.
- REMER (C. F.): Foreign Investments in China. (See above under CHINA.) See chapter xvii: Japanese Investments in China.
- STEIN (G.): Made in Japan. 1935. London: Methuen. 8vo. viii+206 pp. 7s. 6d.
- Tokyo Association for Liberty of Trading:  
 Bulletin No. 2. Japan's Trade with Australia and New Zealand and its Future. 1934. Tokyo.  
 Bulletin No. 3. Occupational Changes in Japan. 1934. Tokyo.



- UTLEY (F.): Japan's Feet of Clay. 1937. London: Faber & Faber. New edition. 8vo. 408 pp. 7s. 6d.
- UYEHARA (S.): The Trade of Japan. 1926. London: P. S. King. 8vo. 326 pp.
- YAMASAKE (K.) and OGAWA (G.): The Effect of the War upon the Commerce and Industry of Japan. (*Carnegie Endowment Economic and Social History of the World War Series.*) 1929. Yale University Press; Oxford University Press. La. 8vo. 405 pp. \$4.
- YARRO (T.) and SHIVASAKI (K.): Nippon: a Charted Survey. 1936. Tokyo: Ko Kusu-Sha. La. 8vo. 487 pp.
- Institute of Pacific Relations*: Conference Data Papers.
- ASARI (J.): Development of the Cotton Spinning Industry in Japan. 1931. Shanghai Conference.
- INOUE (J.): The Economic and Industrial Development of Modern Japan. (Western Influences in Japan, No. 14.) 1929.
- MORIMOTO (K.): The Efficiency Standard of Living in Japan. 1931. Shanghai Conference.
- Supply of Raw Materials in Japan. By the Staff of the Tokyo Institute of Political and Economic Research. 1933. Banff Conference. 8vo. 23 pp. 20c.
- TAKAHASHI (K.): Factors in Japan's Recent Industrial Development. 1936. Yosemite Conference. 8vo. 35 pp. 25c.
- UYEDA (T.): Future of Japanese Population. 1933. Banff Conference. 8vo. 25 pp. 20c.
- : The Growth of Population and Occupational Changes in Japan, 1925-35. 1936. Yosemite Conference. 8vo. 16 pp. 20c.
- and INOKUCHI (T.): Cost of Living and Real Wages in Japan, 1914-36. 1936. Yosemite Conference. 8vo. 30 pp. 50c.
- and MINOGUCHI (T.) and others: Small-Scale Industries of Japan: Cotton, Woollen, Rayon, Rubber goods, Bicycle, Enamel, Iron ware, Electric lamp. 1936. Yosemite Conference. 8vo. From 20c. to 30c. each.

## INDIA

- Great Britain and India: Census of India, 1921 and 1931.
- : Statistical Abstract of India (annual).
- : Report on Moral and Material Progress of India (annual).
- : Review of the Trade of India (annual).
- : Reports of the Indian Trade Commissioner, India House (annual).
- : Report of the Indian Fiscal Commission. Cmd. 1724 of 1922.
- : Report (and volumes of evidence) of the Royal Commission on Agriculture in India. Cmd. 3132 of 1928.
- : Report (and volumes of evidence) of the Royal Commission on Industrial Labour in India. Cmd. 3883 of 1931.
- : Report (and volumes of evidence) of the Central Indian Banking Committee and of the Provincial Banking Committee, 1932.

Great Britain and India: Reports of the Indian Tariff Board, especially regarding:

The Grant of Protection to the Steel Industry, 1924;

Statutory Inquiry into Steel Industry, 1927;

Report on the Iron and Steel Industry, 1934;

Statutory Inquiry into the Indian Cotton Mill Industry, 1927.

——: Reports on the Working of the Scheme of Preferences resulting from the Agreement at Ottawa between India and H.M. Government in the United Kingdom.

——: Department of Overseas Trade. Reports on the Conditions and Prospects of British Trade in India (annual).

ADAR KAR (B. N.): The Indian Tariff Policy with special reference to Sugar Protection. 1936. Bombay: Adar Kar. 8vo. 161 pp.

ANSTEY (V.): Economic Development of India. 1936. London: Longmans Green. 3rd edition. 581 pp. Bibliography. 25s.

BUCHANAN (D. H.): The Development of Capitalist Enterprise in India. 1934. New York: Macmillan. 482 pp. 21s.

DEY (M. L.): The Indian Tariff Problem. 1933. London: Allen & Unwin. 288 pp. 16s.

JAIN (L. C.): The Monetary Problems of India. 1933. London: Macmillan. 208 pp. 10s. 6d.

LOKANATHAN (P. S.): Industrial Organization in India. 1935. London: Allen & Unwin. 431 pp. 15s.

PANANDIKAR (S. G.): Industrial Labour in India. 1933. London: Longmans Green. 294 pp. 9s.

PEARSE (A.): The Cotton Industry of India: the report of a journey to India. 1930. Manchester: Taylor, Garnett & Evans. viii+332 pp.

UTLEY (F.): Lancashire and the Far East. (See above under FAR EAST.)

WATTAL (P. K.): The Population Problem in India. 1934. Bombay: Bennett, Coleman. 185 pp. Rs. 3.80.

#### PERIODICALS AND JOURNALS:

Asiatic Review (London).

Bombay Labour Gazette.

Capital (Calcutta).

Indian Journal of Economics (Allahabad).

Indian Trade Journal (Calcutta).

#### GREAT BRITAIN

Great Britain: Annual Statements of Trade of the United Kingdom.

——: Monthly Accounts of Trade and Navigation.

——: Committee on Industry and Trade (Balfour Committee): Final Report. 1929. Cmd. 3282. 338 pp. 5s. 6d.

——: ———: Survey of Overseas Markets. 1925. 740 pp. 6s.

——: ———: Survey of Industrial Relations. 1926. 497 pp. 5s.

——: ———: Factors in Industrial and Commercial Efficiency. 1927. 544 pp. 5s.

- Great Britain: Committee on Industry, &c.: Further Factors in Industrial and Commercial Efficiency. 1928. 360 pp. 3s. 6d.
- : ———: Survey of Metal Industries. 1928. 528 pp. 5s.
- : ———: Survey of Textile Industries. 1928. 328 pp. 3s. 6d.
- : Commissioner for the Special Areas in England and Wales: First Report. 1935. Cmd. 4957. 106 pp. 2s.
- : ———: Second Report. 1936. Cmd. 5090. 120 pp. 2s.
- : ———: Third Report. 1936. Cmd. 5303. 210 pp. 3s. 6d.
- : ———: Fourth Report. 1937. Cmd. 5595. 209 pp. 3s. 6d.
- : Commissioner for the Special Areas in Scotland: First Report. 1935. Cmd. 4958. 34 pp. 6d.
- : ———: Second Report. 1936. Cmd. 5089. 31 pp. 6d.
- : ———: Final Report. 1936. Cmd. 5245. 29 pp. 6d.
- : Ministry of Labour Annual Reports.
- : Reports of Investigations into the Industrial Conditions in Certain Depressed Areas. 1934. Cmd. 4728. 240 pp. 3s. 6d.
- : Statistical Tables Relating to British Foreign Trade and Industry, 1924-30. 1930. Cmd. 3737 (2 vols.). 5s. 6d.
- ALLEN (G. C.): British Industries and their Organization. 1935. London: Longmans Green. 2nd edition. 335 pp. 10s. 6d.
- BOWLEY (A. L.): Some Economic Consequences of the Great War. (Home University Library.) 1932. London: Butterworth. Sm. 8vo. 251 pp. 2s. 6d.
- CLAY (Henry): The Post-War Unemployment Problem. 1929. London: Macmillan. 317 pp. 8s. 6d. (Out of print.)
- The Problem of Industrial Relations. 1929. London: Macmillan. 317 pp. 12s.
- DANIELS (G. W.) and CAMPION (H.): The Relative Importance of the British Export Trade. London & Cambridge Economic Service Special Memorandum No. 41. 1935. 18 pp. 2s. 6d.
- DANIELS (G. W.) and JEWKES (J.): The Comparative Position of the Lancashire Cotton Industry and Trade. 1927. Manchester: John Heywood, Ltd. 101 pp.
- : The Crisis in the Lancashire Cotton Industry (in the *Economic Journal*, vol. xxxvii, 1927).
- Economics Research Section, Manchester University: Readjustment in Lancashire. 1936. Manchester University Press. 137 pp. 4s. 6d.
- Economics Section of the British Association (Research Committee): Britain in Depression, 1935. Pitman. 473 pp. 10s. 6d.
- ELLINGER (B. H.): Japanese Competition in the Cotton Trade (in the *Journal of the Royal Statistical Society*, part ii, 1930).
- GRAY (E. M.): The Weaver's Wage. 1937. Manchester University Press. 69 pp. 5s.
- JEWKES (J.) and GRAY (E. M.): Wages and Labour in the Lancashire Cotton Spinning Industry. 1935. Manchester University Press. 222 pp. 8s. 6d.

- Liberal Industrial Inquiry: Britain's Industrial Future. 1928. London: Ernest Benn. 503 pp.
- LOVEDAY (A.): Britain and World Trade. 1931. London: Longmans Green. 229 pp. 10s. 6d.
- LUCAS (A. F.): Industrial Reconstruction and the Control of Competition. 1937. London: Longmans Green. 384 pp. 15s.
- MCCALLUM (E. D.): The Problems of the Depressed Areas in Great Britain (in *International Labour Review*, August 1934).
- MARQUAND (H. A.): South Wales Needs a Plan. 1936. London: Allen & Unwin. 256 pp. 7s. 6d.
- PIGOU (A. C.): The Economic Position of Great Britain (Royal Economic Society Memorandum No. 1, July 1927).
- and CLARK (C.): The Economic Position of Great Britain (Royal Economic Society Memorandum No. 60, June 1936). 43 pp.
- Political and Economic Planning: Report on the British Cotton Industry. 1934. London. 147 pp. 6s.
- : Report on the British Iron and Steel Industry. 1934. London. 80 pp.
- : Report on the British Coal Industry. 1936. London. 214 pp. 7s. 6d.
- RICHARDSON (J. H.): British Economic Foreign Policy. 1936. Allen & Unwin. 250 pp. 10s. 6d.

# APPENDIX I

## A NOTE ON DEVELOPMENTS IN JAPAN DURING 1938

THE Government, through Exchange Control Laws and Import Restriction Laws, is still maintaining the yen at 1/2 and rationing between industries the imports which become possible under this policy. The policy, however, is not only leading to a reduction in, or disappearance of, luxury imports, but is even applied to raw cotton with the result that the export of cotton textiles is being seriously hampered, and consequently Japan's power to buy other raw materials is falling. Nevertheless, the main effect is upon the domestic consumer of cotton cloth, who is compelled to buy fabrics mixed with staple fibre or rayon.

A large mass of economic legislation has been put before recent sessions of the Diet, and two important measures are now being discussed dealing with the placing of all electric power generation under a national company, and the improvement of conditions of tenant farmers. In January 1938 a new Ministry was founded to deal with matters of national health (including social insurance and pensions), labour, and social welfare work.

In China a Federal Reserve Bank has been set up at Peking, two giant corporations are to be formed for economic development in North and Central China, the South Manchurian Railway Co. (a semi-Governmental organization) has been put in charge of all railways under Japanese control in North China, while its subsidiary, the Kochu Koshi, and a number of other companies, are starting to utilize the iron ore and coal resources there.

The Government is still obtaining its war funds mainly through bond-issues. The plans for these show greatly increased estimates. So far, however, actual expenditure has lagged far behind estimates. Cost of living and wage-rates continue to rise slowly.

According to a report of the Mitsubishi Economic Research Bureau, based on the latest Chinese estimates, the coal and iron ore reserves of China are considered to be as follows:

Million metric tons			
Coal			
N. China	.	.	215,019 (mostly in Shansi and Shensi)
Rest of China	.	.	18,040
			<hr/>
Total	.	.	233,059

## APPENDIX I

## Iron ore

N. China	.	.	.	175 (mostly in Chahar and Hopei)
Rest of China	.	.	.	<u>148</u>
Total	.	.	.	323

The coal is abundant, but mostly far from the sea; the iron resources are not large, but could, for a number of decades, provide the basis of a substantial industry.

N. SKENE SMITH.

*April 1938.*

# APPENDIX II

## JAPAN'S BALANCE OF INTERNATIONAL PAYMENTS. (JAPANESE EMPIRE)

(In million yen)

	1931		1932		1933		1934		1935	
	Net exports	Net imports	Net exports	Net imports	Net exports	Net imports	Net exports	Net imports	Net exports	Net imports
GOODS	..	142	..	57	..	53	..	70	141	..
SERVICES:										
Interest and dividends	..	24	..	38	..	53	..	26	..	14
Shipping and transport	119	..	123	..	153	..	171	..	208	..
Emigrants' remittances	33	..	95	..	99	..	128	..	141	..
tourist payments and gifts	..	..	..	..	..	..	..	..	..	..
Government receipts and payments	..	36	..	91	..	125	..	139	..	147
Commissions and insurance	3	..	9	..	9	..	23	..	10	..
On SERVICES	..	11	2	..	2	..	..	24	..	28
GOLD COIN AND BULLION	388	..	112	..	35	..	..	..	..	..
BALANCE <sup>a</sup>	..	330	..	155	..	67	..	63	..	311
	543	543	341	341	298	298	322	322	500	500

<sup>a</sup> This balance, if the figures were accurate, would indicate the 'export' or 'import of securities' (import or export of capital).

In 1931 there was a heavy export of capital, which, although supported by gold exports, led to exchange depreciation at the end of the year. Similar but less marked exports took place in 1932. In 1934 there was a large export of capital to Manchuria, which was, however, offset considerably by realizations of Japanese investments abroad. In 1937 there was an increase of imports of goods, in Japan proper, of 612 million yen. This was largely offset by gold exports of 400 million yen in the early part of the year. Gold exports in such volume will be impossible in the future; therefore imports must be restricted if the exchange is to be prevented from depreciating.

SOURCE: League of Nations, *Balance of Payments*, 1936.





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